A Sketch
OF
THE ORIGIN AND DEVELOPMENT OF THE SCIENCE OF HYGIENE.

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To trace the history of the search of the human race after health would be almost tantamount to writing the history of the race itself. Fortunately, both for myself and my hearers, such an undertaking is neither expected nor intended. An inquiry into early wanderings and gropings after health would be doubtfully useful, even if it were likely to be interesting, for it would bear to the hygiene of the present day something of the same relation that the visions of the astrologer bear to the astronomy of Newton. Perhaps some might object that this is claiming too much for our subject, and that even its title to be treated as a science may be questioned. But much the same objection might be made to medicine, and perhaps even to other branches of knowledge which are conventionally included in the list of exact sciences. A careful examination, however, of the position which hygiene now holds will, I think, justify us in claiming that it has made such advances as may fairly entitle it to take its place among the progressive if not absolutely exact sciences. Its literature has been said with truth to be amongst the oldest in the world, the earliest records being religious ceremonial formulas which ever involved rules directed to maintain the health and efficiency of the people.

It has been proposed to place upon these walls the names of the illustrious dead who were the pioneers and founders of our science, and the difficulty will probably lie more in the wealth than in the paucity of material, rendering selection less easy where so many are worthy. We cannot doubt that in order of chronology the first name to be honoured is that of Moses, as the author of the most complete and detailed system of hygiene in ancient times. His rules, given as part of the Divine Law, are of course mixed up with religious ceremonial, both as being appropriate to the age and to the nation for whom they were intended, and also as being more likely to be followed when made in that way a part of the religion of the people. We may be pretty well sure that the code of Moses was the outcome of the wisdom and experience of long past ages. "Nemo fuit repentè turpissimus"; so also "Nemo fuit repentè hygienicus." Be that as it may, however, one cannot but admire the excellent precepts laid down for the cleansing and purifying of house and camp, for the security of pure water, for choice of good and wholesome food, for the isolation of the sick and the unclean, for the destruction of refuse &c. Some of the rules we may smile at now-a-days, as being a superfluity of precaution, and it is true that with advance of knowledge we can see that certain of them were unnecessarily sweeping in character; but still it would not be too much to say that a fairly strict adherence to the Mosaic law would have preserved mankind from many of the disastrous plagues which have afflicted it. The history of the Jews themselves illustrates this point. Of old, when a pestilence visited them, it was always represented, and probably with perfect truth, as a punishment consequent upon the breaking of the law, a statement which may be frankly accepted either by those who maintain the special intervention of a Divine Providence, or by those who regard it as a strict consequence following on antecedent cause. In later times, and especially during the Middle Ages, the Jews enjoyed a remarkable immunity from outbreaks of epidemic disease, an immunity which still distinguishes them in our own time. Several causes have combined to bring this about. 1st. They are generally temperate and frugal. 2nd. They still in the main follow out the Mosaic law with regard to their food, their meat being carefully examined and selected for its freedom from signs of sickness or parasites, nothing but pure (or kosher) meat being used. And 3rd. By reason of the periodical purifications which take place in their dwellings, as a part of their religious rites, which purifications extend to most minute particulars, so minute as to render it hardly possible that disease germs should lurk in any part of the dwelling. So little, however, was the real cause of their healthiness appreciated by our predecessors in the bad mediæval times, that it was held an irrefragable proof of their demoniac machinations, which led them to poison the wells which supplied the Christian community with water, their bigoted enemies not stopping to consider that it would be much against the interest of the Jews to kill or harm those from whom, by commerce, they gained their livelihood. But, indeed, our own time furnishes the exact counterpart of this cruel and unreasoning tyranny, not merely in the savage outrages perpetrated by the rude and ignorant populace of Russia, but in the disgraceful *Judenhitze* which has stained the name of civilised Prussia, and was led by—save the mark—the chaplain of the Court itself!

Let us turn now to the classic records, as they are called—that is, the writings that remain to us from the Greeks and and Romans. Considering how many men must have written in those times, how general knowledge and the art of writing was, we have to lament the paucity of the literary remains that have survived. How we curse the fanatical zeal of Omar, who burned the library of Alexandria, and still more the senseless stupidity of the monks of later days who scraped out the writing from priceless manuscripts to write missals and the like in their place! As might be expected, it is to the Father of Medicine, the great Hippocrates, that we owe the most of what we have left of Greek hygienic literature, although we must admit that even in Homer there are traces of hygienic knowledge, and that there the disinfecting powers of cleansing fires of sulphur are fully recognised. It is a remarkable fact that one of the chief books of Hippocrates relating to hygiene—viz., that on "Air, Waters, and Places"—is one of the few about the authorship of which no doubt has ever been raised. Like the code of Moses, it was probably a summary of the already existing knowledge of the subject, supplemented and extended by the experience of the great physician himself. Another name that deserves remembrance is that of Xenophon, whose triumphant retreat was no less a hygienic than a military triumph; and there is no doubt also that Alexander the Great was a master of the art of hygiene, to have taken his force so far with so little loss. Nor ought we to omit the name of Herodicus, one of the preceptors of Hippocrates, and the first to introduce gymnastics on scientific principles, not only as a curative, but also as a preventive measure. The works of Asclepiades, who boasted that he would never be sick, and did, indeed, die of a fall, and those of Aretæus, doubtless contained reference to preventive medicine; whilst those of Galen, which extended to 300 volumes, the majority of them now lost, furnished many of the precepts on which later hygiene was based. On the other hand, the myth which makes Health, or Hygieia, the daughter of Asklepios (whom we call Æsculapius) no doubt arose from an instinctive perception of the value of medical science in preserving health as well as in the cure of disease. We may also be permitted to believe that the honours paid to his sons Machaon and Podalirius were due, at least in part, to their hygienic foresight as well as to their medical and surgical skill. The famous line of Homer shows the estimation in which the military surgeon of those days was held, and the consternation that fell on the Grecian camp when Machaon was wounded:—

Ἰητῆρος γὰρ ἀνὴρ πολλῶν ἀντάξιος ἄλλων,

which is thus rendered by Pope:

"A wise physician skilled our wounds to heal,
Is more than armies to the common weal."

Would that modern commanders had an equally just and appreciative estimation of the services of the best abused but most beneficent of professions. I may mention that the above line of Homer has been selected as the motto for the medal in military surgery, founded by the liberality of the late Mr. Nathaniel Montefiore, and awarded every session at the Army Medical School, Netley. Besides the writers already quoted it would be unjust to omit the name of Aristotle, whose writings include important hygienic precepts. The praise of health was also sung in an ode of

Ariphron, who calls her πρεσβιστη μακαρων, eldest born of the blessed, and also by Isocrates, one of the purest of Greek writers, whose line Ἡ περι το σῶμα και την ψυχην Ὑγιεια, has been adopted as the motto of the gold medal founded at Netley in memory of Edmund Alexander Parkes. The general life of the Greeks was eminently hygienic, being mostly out-door and under favourable conditions, persons even of high position taking part not only in active occupations but in labours that might be even considered menial by the unthinking. The honourable place that athletic games held is a point of resemblance between the Greeks and our own countrymen that ought not to be lost sight of. Nothing is more conducive to health of body and mind than active exercise in the open air, and the splendour of Greek literature, art, and knowledge is a sufficient answer to those who are afraid lest athletics should develop the muscles of our youth to the detriment of their brains.

Among the Romans the care bestowed upon the provision of pure water—with which is connected the celebrated name of Frontinus, as *Curator Aquarum*—and their elaborate system of drainage, prove that they had correct ideas on some of the fundamental questions of hygiene. Their fondness for bathing and extensive establishments for that purpose remain monuments of the next to godliness which even at this distance of time we, with all our boasted civilisation, have been unable to emulate. The more recent discoveries in the Campagna have still further shown that they were fully aware of the conditions which alone could make that now pestilential region habitable, as a system of subsoil drainage has been revealed that is a reproach to the ignorance and supineness of modern times. Nor was Rome the only city of antiquity that was efficiently drained, for we have evidence of it at Agrigentum at least; but Rome was certainly among the oldest of which we have actual remains, the beginnings of its great cloaca going back at least five and twenty centuries. Another direction in which the Romans showed great knowledge of the principles of hygiene was in the management of their troops on the march and during war. The rules for encampments given by Vegetius are excellent, and to the great care shown for every detail of sanitation must be attributed the comparatively small loss which the armies of the Romans appear to have sustained. We may say, indeed, of classical times generally that there was a remarkable absence of devastating epidemics, none of those on record approaching in fatality and intensity the great plagues which swept over Europe down to quite modern times.

In taking a cursory retrospect of the Old World in its medical aspects, I should be inclined to say that on the whole its medicine was as much preventive as curative. It is probable that such a proposition would be combated; but, in spite of the treatises that have survived in curative medicine and surgery, and the long list of medicaments that we find, for instance, in the works of Galen, there was probably as much, if not more, done in the preventive line as in the simply curative. The motto of the time might have been, "Venienti occurrite morbo." Two things seem to indicate this:—1. There was a dread and impatience of disease, so much so that men were known to commit suicide to escape it; like the aged Indian who slew himself at the tomb of Achilles, for fear he should die of disease, from which he had through life been free. 2. The sentiment of pity for the weak and the oppressed appears to have been absent; there was the same tendency as we find among animals and among savages to hold a sick man of little account, as useless to the State, and the sooner got rid of the better. Hence, perhaps, the curious fact that we have no record whatsoever of public hospitals or infirmaries for the sick poor during the classical period—the earliest being as late as the reign of Justinian.

From the time of the decline and fall of the Western Empire the progress of hygiene appears to have been arrested. Some few of the treatises of the Greek and Latin physicians survived, others were known only as translated from the Arabic, &c., whilst the wholesome traditions of the hygienic life of Greece and Rome appear to have decayed, and we pass into a dark and dirty period when fanaticism usurped the place of religion, and dirt became the odour of sanctity. The Hermits of the Thebaïd became the types of all that was holy, and so framed their lives and manners as to be as much as possible the antithesis of the heathen. The heathen led an active and healthy life, the Christian fanatic led a life of mooning and inaction; the heathen washed himself and his clothing, the Christian forswore cold water and wore his clothing till it fell off his body from sheer rottenness. The picture of the thousand years which elapsed between the downfall of Rome and the final capture of Constantinople, as drawn by Michelet in his "Sorcière," is one of the most striking as well as disgusting that can be conceived. "Pas de bain," he says, "pendant mille ans!" Can we wonder at the plagues which devastated Europe? Is it astonishing that the "black death" cut off two-thirds of its inhabitants? Although the revival of learning was partly instrumental in arousing the nations to a sense of their degraded condition, yet the change was by no means great, even down to much later days, and it is humiliating to think, from the accounts of Erasmus and other visitors to our shores, that our own country remained long pre-eminent in Europe for dirt and disease. Hardly a decade passed without visitations of some foul malady until the cleansing fires of the great conflagration of London in 1666 appear to have extinguished the last vestiges of those old and dreaded enemies. It is true that even then we were far from being free from epidemic disease, and that we are still open to its ravages; but the forms of disease which have shown themselves since the Great Plague are of a type, if not entirely different, still of a kind and under circumstances which have been more understood, and the causes traced more certainly to particular conditions. But one can easily imagine how different the case of Europe might have been could the hygienic knowledge collected during and before the classic period have been carefully put together, formulated, and acted upon by the succeeding generations. As it is, whatever may have been written in the Middle Ages, was either a mere re-echo of the classic writings, a copying of the Arabian physicians, or a farrago of nonsense into which spells and magic largely entered. When a fresh interest began to be excited, and men began slowly to perceive that the elixir of life was a vain imagining, their minds turned more to actual observation, and among other things the science of dietetics attracted much notice. The older writers had already written much on diet, and even Hippocrates had pointed out the close relation between food and work, a relation which has been fully recognised only in our own generation. Various treatises on food and regimen were written later, of which the two that might claim notice are the one entitled "Tacuinus Domus," or "Tables of Health," published under the name of "Elluchasem Elimithar," and written, it is said, by two Jewish physicians at the request of Charlemagne. This is a curious old book, and very "rarely met with," as remarked by Mackenzie in his "History of Health," "except in public libraries, which is no great loss, being but a mean, perplexed, and whimsical performance, and scarce worth taking notice of, but only because it happens to be sometimes quoted by the learned." We possess a very fine copy of this book, which is a beautiful specimen of the printing of the early part of the sixteenth century, in our library at Netley. It is quaintly illustrated throughout with woodcuts of much spirit, representing every article and operation mentioned in the book which it is possible to illustrate. But the most celebrated mediæval work on the subject is undoubtedly the renowned "Regimen Sanitatis Salerni," the code of the famous university of Salerno, which is believed to have been compiled by John of Milan in 1099. So much was it esteemed that it was called the "Flower of Physic:" "Hoc opus optatur, quod flos medicinæ vocatur." Haller enumerates twenty editions, and it was translated into various languages—among others into English by Paynell (1579 and 1609) and by Dr. P. Holland, whose version is the best known. It was also the subject of numerous and voluminous commentaries, such as that by Arnoldus de Villa Nova, none of which, however, added much that was valuable to the original. We may well believe that this Code of Salerno is a summing up of the hygienic knowledge and experience of the time, most of it probably borrowed from the ancient writers, and suited to the habits of the age. Some of it is no doubt fantastic, but much of it is sound sense. Some of the precepts might well fit many towns of the present day, the metropolis among others:

> "Lucidus ac mundus sit vitè habitabilis aër,
> Infectus neque sit, nec oleus fœtore cloacæ."

Dr. Holland's translation is not very faithful; some may render it this way:

> "Dwell in air both clear and pure,
> Free from taint or smell of sewer!"

I do not know, however, if our friends of the Blue

Ribbon persuasion would quite approve of the next precept:

"Si nocturne tibi noceat potatio vini,
Hoc tu manè bibas iterum, et fuerit medicina."

Which I take the liberty of rendering thus:

"If overnight your drink has hit you,
Take a hair of the dog that bit you!"

Talking of dogs, I am sure all would rejoice if the receipt for the cure of a mad dog's bite were only efficacious, as it is certainly simple, and Dr. Holland translates it thus:

"A mad dog's byting may recured be,
With onyans, hony, vinegar, these three."

But we must not dwell any longer on this quaint book, although it was long the basis on which works on hygiene were founded. A list of writers who followed, more or less obscure, is given by Mackenzie, in his "History of Health," and by Sir John Sinclair, in his "Health and Longevity." Indeed, it may be said that no writings on science during this dark period were worth notice, except those attributed to our own Roger Bacon.

One of the first really practical writers on the subject of hygiene was the well-known Ludovico Cornaro, a noble Venetian, who, after a youth of intemperance and excess, reformed his ways and kept so strict a watch over his diet and habits that he prolonged his life to the age of 100 years, dying in April, 1566. Twelve ounces of solid food and fourteen ounces of liquid, in this case wine, were all he allowed himself, but then he led a life that was less life than mere vegetation, for he was careful to avoid heat, cold, fatigue, grief, watchings, and every other excess that could hurt his health. "How," says Sir John Sinclair, "could the business of the world be carried on if every man, like Cornaro, were to begin to follow such a system at the fortieth year of his age." Yet the value of Cornaro's treatise was very great, for it was an indisputable proof that life might be maintained, and even health, upon much smaller amounts of food than were often taken, and further, that temperance and moderation are the best resources against both disease and accident. He recounts how he had been upset in a carriage, and been in consequence severely bruised and had an arm and leg dislocated. The doctors wished to bleed and purge him, but he, confident in his temperate habits, desired merely that his limbs should be set and he himself be let alone, after which he made a rapid and complete recovery. The advanced age to which he lived, and also the great ages of Pope Paul Farnese, Cardinal Bembo, and the Doges Lando and Donato, whom he cites, all of whom were men of regular and temperate lives, contrast remarkably with the short lives of the average of men of the time, old men being very rare, and even those who had passed the half century uncommon.

Various writers followed Cornaro, few of them of much note, save the famous Jerome Cardan, one of the most learned of the physicians of the Renaissance, but somewhat whimsical in his hygienic views. He opposed the views of Galen, and in particular objected to exercise that caused the smallest amount of fatigue or perspiration, or accelerated the respiration. He considers it to be a proof that Galen was wrong, seeing that he died at the age of seventy-seven, which, Cardan says, cannot properly be considered old age. Cardan, however, died himself a youth of seventy-five! He adhered to the principles of Cornaro in diet, and showed that he understood to some extent hereditary influence, as he considered that one of the chances of living to a great age was to be descended from a long-lived family.

Of the other writers of the period I will only refer to Thomas Philologus of Ravenna, on account of his strong protest against intramural interment, thus anticipating by some three centuries the happily fruitful labours of our distinguished countryman Edwin Chadwick.

The next writer of eminence was the celebrated Sanctorius, a native of Istria and a professor of Padua. He wrote a work on health, entitled "Medicina Statica," and he also began the era of exact observation by his well-known experiments with the weighing-chair, by which he endeavoured to show the weight of the insensible perspiration. His experiments were very crude and inaccurate; but they were in the right direction, and his work may be considered as marking an epoch in the advance of scientific observation. The aphorisms in his book are couched in quaint, and even fantastic, language, but many of them are sound when stripped of the vagueness and mannerism of the time. He is particularly severe upon a certain "Staticomastix," who had criticised him, and had asserted that a plentiful perspiration did not take away from the body one ounce of weight.

The writers from the time of Sanctorius down to the end of the seventeenth century call for little attention, as they seem to have added but little to the knowledge of the time. The remarkable physical discoveries of the close of that century and throughout the whole of the next certainly paved the way for more exact observation in medicine, both in its purely medical and its etiological aspects. Accordingly, we have the observations of Boerhaave and Haller, and a host of other names of distinction, all representatives of progressive medicine, either directly or indirectly connected with the advance of hygiene. Sketches of the various writings of this and preceding periods are given by Mackenzie in his "History of Health," by Sir John Sinclair, and by Hallé in his long article on Hygiène in the "Encyclopédie Méthodique." And I may here pause for a little to consider the name of the science which we have adopted. It has been objected to that we have taken a foreign word when an English one would do, and that there is no reason why the plain word "health" should not answer our purpose. To this we may reply that the foreign word better defines the science or art, and is less likely to lead to confusion; that the word is now adopted and used in every country of the world, and is therefore common property; and that by its use we accomplish the same end as when we apply a scientific name to a disease, or to a plant, an animal, or a chemical compound. Each of these, under its scientific name, is easily recognised and accurately described. The word "hygiene" itself is derived from the Greek Ὑγιάνω, "I am in good health," and was apparently first definitely used by Ambrose Paré, according to Littré. Its use in this country was not general until quite recent years, the expression "medical police" being more usually employed. In Germany the kindred expression "Sanitäts-Polizei" was adopted, as well as the more truly Teutonic word "Gesundheitspflege"; but now the word "hygiene" (formerly written "hygieine") is coming into regular use. There is therefore some advantage in having a common title for our science, even although it be of foreign origin. But, after all, a good half of our tongue *is* of foreign origin, and as it is one of the most assimilative of all the languages of the earth, we need not reject a word that has much to recommend it on mere grounds of sentimental nationalism.

It is a little difficult in a necessarily restricted lecture to convey any exact idea of the way in which modern hygiene became formulated into so much of a science as it can at present lay claim to; but I will attempt to make a brief sketch of its more salient points. In the eighteenth century there were several important questions inquired into, and to a large extent solved, of which the chief were: (1) The influence of air as a factor in the spread of disease; (2) the true cause and prevention of scurvy; and (3) the prophylaxis of small-pox. Taking the last first, we may say that the introduction of inoculation was a most important step, even although we must admit that it introduced a greater danger to the community at large than could be compensated for by the protection to individuals. But it was the first step on the road which led at the close of the century to vaccination, one of the most signal triumphs of preventive medicine, and in our own time to the magnificent results obtained by the renowned Pasteur, results which seem pregnant with so much hope for the future of our race.

The inquiry into the causes of scurvy was another step in advance, of the most signal importance. No one in the present day can form any idea of the ravages that terrible disease produced. All long voyages were imperilled by it, whilst the very existence of England depended upon her fleet, which had frequently to return to port absolutely crippled with scurvy, in some cases as many as ten thousand men being landed from the Channel fleet helpless. Although so far back as the seventeenth century the efficacy of fruits and fresh vegetables as preventives had been surmised if not actually noted, it is really to the renowned Captain Cook that the credit is mainly due of having established this important fact. That eminent navigator never lost an opportunity of taking on board fruits and fresh vegetables whenever he could, and the result was that he was able to bring home from a lengthened voyage crews in almost perfect health and condition, a thing never before known. It took many years, however, to impress this fact sufficiently upon the authorities, and it was not until 1796 that the medical officers of the navy (among whom was the renowned Sir Gilbert Blane) obtained the regulation ordering lime-juice to

be supplied to our seamen. The effect was magical; scurvy lost its terrors, and it may be that the supremacy of England at sea during the Napoleonic wars was in part owing to the improved condition of her seamen during that gigantic struggle. We have still a monument of the extent of the disease in the immense naval hospital of Haslar, the largest in this country, which was built of such dimensions mainly to admit the extraordinary number of scurvy patients which were being continually landed from our fleets. We have not yet got entirely rid of this enemy, but I think we know now how to combat it, in spite of heretical opinions which find expression from time to time.

The recognition of foul air as a factor in disease was certainly begun in the last century, when the brilliant discoveries in pneumatic chemistry made by Lavoisier, Cavendish, Priestley, Black, and Rutherford threw such a flood of light upon a previously obscure subject, and opened the whole immense vista of the boundless science of modern chemistry. It was only then that the physiology of respiration could be even partially understood, and the changes recognised which take place in the respired air from the lungs of man. The great disaster of the "black hole" of Calcutta, and the terrible effects of the gaol fever, investigated by Howard and others, pointed to foul air as a main factor in the propagation of disease and death; and this was further corroborated by the observations made by military surgeons that outbreaks of typhus (or putrid fever) were most rapidly arrested when troops were encamped and scattered widely over the surface of the ground. It was reserved for the later researches of Neil Arnott and other hygienic observers of the present century to prove the still more important fact that foul air is the main cause of the still more general and fatal class of destructive lung diseases, which in this and in other lands cut off so many of the brightest and the best.

Another important discovery of the last century was the determination of the cause of the well-known lead colic by Sir George Baker. This opened up the large field of metallic poisoning which has received so much elucidation and proved of such importance in reference to the water-supply of large communities.

In the present century we have to point to the establishment of the fact of the water carriage of disease, with which the name of Snow is so honourably associated, the differentiation of continued fevers by Stewart and Jenner, and their connexion with the poison of infected excreta by the labours of Budd and other eminent men. To those we must add the elaborate investigations into the modes of propagation of cholera, dysentery, and other tropical diseases, and the means by which scarlet fever, diphtheria, &c., are carried from place to place by various channels of communication. It would be unadvisable, even if it were possible, to enter into details on these points, but there is one branch of the subject on which we must dwell for a little. No inquiry can assume a scientific form unless it has a numerical basis to work upon, and therefore it behoves us to note the starting-point of such a basis in hygiene, if we can find it. This we do find in the collection of statistics, a beginning of which was made a long time ago in the bills of mortality kept in this country. We know how imperfect those were, and how even the population of this country was not correctly known until within the lifetime of men still living. But still beginnings were made, and the question taken up more and more enthusiastically by enlightened men, until at last the Government Statistical Department was formed, and that remarkable series of reports begun which will immortalise the name of William Farr. From that time the future of hygiene was assured; for there was sound ground to work on, and if we add to that the valuable reports on the health of towns published by the Commission of which the present Duke of Buccleuch was president, we shall have stated some of the most important foundations of modern sanitary science. Those reports disclosed a state of things little dreamt of, and the statistical returns compiled by Dr. Farr showed how much the life and health of the nation were dependent upon the conditions in which its individual members were placed. The establishment of the General Board of Health, under Mr. Chadwick, was one of the valuable outcomes of this remarkable movement. Although the original Board of Health was brought to an end in 1854, yet its work has been continued and expanded under Mr. Simon, his colleagues and successors, in spite of many difficulties and obstacles.

The part which the public services, such as the Army and Navy, played in the progress of hygiene was very important, as might indeed be expected; for under no other circumstances could bodies of men be so well observed, and the effects of surroundings and conditions upon health noted. Accordingly we have a long roll of names connected with those services which must ever be remembered with honour; in the Navy we have such men as Lind, Blane, Trotter, Burnett, &c.; and in the Army, Pringle, one of the most philosophical physicians who ever lived, Brocklesby, Fergusson, McGrigor, and a host of others. The labours of the late Sir Alexander Tulloch, Deputy Inspector-General Marshall, and Assistant-Surgeon (now Surgeon-General) Balfour, in collecting and arranging the army statistics, were of the highest value, and it is not too much to say that the publication of the first army medical statistical report marked an epoch in hygiene, especially in that part that deals with climatology. It exposed the fallacy of the common notions of acclimatisation, of the advantages of a seasoning fever, and similar ideas. It showed also that it was possible for men of temperate habits and in hygienic conditions to live and thrive in the tropics, whilst the death and sickness that were unfortunately so common were due much more to the ignorance and folly of man than the influence of climate in any form. The truth of that is to be seen now when life in the West Indies is actually healthier, especially for young soldiers, than service at home, whereas sixty years ago a tour of service there was looked upon as almost a sentence of death. It is true we have still yellow fever to combat, but we know now much better how to deal with it when it does come, and how to obviate its invasion when it is threatened. The army medical statistics are continued now yearly, but it is a matter of regret that they have been allowed to be published in so abstract and undetailed a shape as to deprive them of much of their utility. It is to be hoped that this mistake may be remedied, and that the saving of a trifling sum, which is said to be the reason, may be recognised as a truly false economy. But perhaps the most remarkable contribution the Army has made to sanitation has been by the evidence given to the Royal Commission of 1857, which met after the Crimean war to investigate the causes of the sickness and mortality of our troops. The results of that Commission are well known, and from its publication may be dated the reforms which have been productive of much advantage both to our own and foreign armies, and to the civil population as well. The paramount influence of foul air in the production of lung disease was proved to demonstration, and the art of ventilation was placed upon a secure foundation. The Barrack Hospital Committee, of which Dr. Sutherland and Captain Douglas Galton were the active members, laid down a series of regulations for the construction of barracks and hospitals, which have been followed with the utmost benefit both at home and abroad. Following this came the Indian Commission, which did for that vast dependency what the Home Commission had done for the rest of the empire. The mortality in India was found to be inordinate, and it was equally clearly traced to insanitary habits and surroundings. To recognise an evil and its cause is half way to curing it, and after a lapse of a quarter of a century we can point, not certainly to perfection, but to such an improvement as might fairly at one time have been looked upon as chimerical. The death-rate of the army at home is only two-fifths of what it was before the Crimean war; the death-rate in India is only one-third, and the death-rate in the West Indies one-tenth.

In civil life it has recently been shown that the improvements of later times have resulted in a diminution of 2 per 1000 in the general death-rate, and with the knowledge we now have of the causes of disease we may be sure that a general death-rate of not more than 15 per 1000 may be confidently looked for. We have not yet got rid of the fatal endemics in our midst, but they are in some directions diminishing, and we have good hope for the future; whilst it seems probable that neither cholera nor any other introduced pestilence could establish a foothold in our land. The remarkable immunity of soldiers and prisoners in the last epidemic shows what can be done when people can be compelled to lead fairly hygienic lives.

I might extend this lecture by reference to the various theories of disease propagation, but time will not permit of it, even if it were otherwise desirable. I may, however, say that no one theory yet promulgated completely satisfies the requirements of the case, and that there may be some

basis of truth even in the most conflicting views. So much has been done hitherto, and so much activity is being shown in investigation, that we cannot fail ere long to find the key to many of the mysteries that now baffle and perplex us. It is quite clear that it is only by a knowledge of the causes of disease that hygiene can be advanced, and that it can never be in any way perfected without a complete system of etiology; and we are at present in this position, that practical hygiene has to some extent outstripped the knowledge of disease causes. We look, therefore, anxiously towards the pathological investigations of the time, and we deeply deplore the well-meaning but misguided zeal which is at present placing such grave obstacles in the way of the only means by which true science can advance—namely, direct experiment.

Although there are many names I might refer to as great writers in hygiene, abroad as well as at home, there is one which we cannot omit in a lecture like this, more especially as it is the first delivered in this museum which has been founded to his memory. Edmund Alexander Parkes did more than any other one man in this or any age to make hygiene a positive fact, a practical science, based upon not only philosophical conceptions but actual experiment. Starting in life as an army medical officer he was able to produce during his short service in India and Burmah works upon dysentery and cholera, which will always be of the greatest value. Retiring into civil life he became eminent as a physician and teacher, and in 1855 he undertook the organisation of the hospital at Renkioi, in the Dardanelles, which was a perfect model of successful hygienic administration. Struggling with distressing and dangerous disease he continued to lead a life of intellectual activity not often accomplished by the most robust; and when, in 1860, the Army Medical School was established by Lord Herbert of Lea, Sir James Clark had no hesitation in advising that Dr. Parkes should be secured if possible as the Professor of Hygiene. How excellent the foresight of that eminent physician was we all know, for Dr. Parkes was not only the first professor of the science in this country in point of time, but also the first in every sense of the word. The publication of his well-known "Manual of Practical Hygiene" gave us for the first time a work on the subject, which was not merely a string of opinions and surmises, but at every point brought opinion to the test of figure and experiment, where it was possible, and thus laid the foundation for a real science in the future. Similarly with his teaching he pressed upon the Government to establish practical laboratories for his pupils, where they could do for themselves as much of the experimental work as time and opportunity allowed; and he impressed upon those who studied under him the necessity of testing everything by actual investigation and bringing all statements to the proof of figures before accepting them as true. There was never probably a man of calmer and more judicial mind, a man more rigidly critical of his own work, or more kindly disposed to allow every credit to the work of others. Having known him personally for many years, during thirteen of which I was his assistant and colleague, I can bear confident testimony to the exceeding beauty of his character, in which "sweetness and light" were never more truly displayed, and the scrupulous accuracy and care with which every investigation of his was carried out. The science of hygiene could have no purer and better founder and its votaries no brighter and more spotless example.

NOTE OF AN INSTANCE OF THE

VALUE OF PHYSIOLOGY IN THE PRACTICE OF SURGERY.

BY WILLIAM S. SAVORY, F.R.S.,
SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

A GOOD instance of the value of physiology in its direct application to the practice of surgery occurred some time ago in St. Bartholomew's Hospital. A man was admitted with aneurism of the second and third portions of the right subclavian artery. In discussing the various plans of treatment still open to the surgeon, the question of placing a ligature on either the axillary or common carotid, or on both of these vessels, was considered. In favour of selecting the carotid, the fact was insisted on that pressure on that vessel produced a very manifest diminution in the pulsation of the tumour, an effect very far transcending that produced by compression of the axillary. On this ground ligature of the carotid was for awhile generally approved; but in demonstrating the effect of pressure on the carotid it became obvious that the sudden and striking reduction, not so much in the force as in the frequency of pulsation in the aneurism, was due directly to the effect upon the action of the heart of irritation of the pneumogastric—the inhibitory nerve. This explanation was not, however, at once accepted by all, not until the reduction not only of the force, but also of the frequency of pulsation, was clearly made out, and the confirmation of the truth by a like effect being produced by pressure on the opposite side.

The fact has been long recognised. Waller more than twenty years ago called attention to this effect of "mechanical irritation by simple pressure on the trunk of the nerve."[1] He says: "I generally apply pressure of the fingers at the highest point of the neck behind the ramus of the lower jaw. A moderate amount of pressure applied in this manner is usually sufficient in the course of about a minute to produce symptoms which are at once easily recognised as originating from the irritation of the vagus and the sympathetic nerve. We observe a considerable disturbance of the heart's action. At first there is increase in the number of its pulsations with decreased power, as may be easily ascertained by the pulse. To this supervenes a retardation of the heart's action of about four to five beats a minute of its initial number, at the same time there being decrease of the force of the pulse. At the next stage the heart's action may become so enfeebled as to produce syncope." He adds: "It is easily ascertained that the symptoms above described are not owing to compression of the carotid artery, as they may be produced without obliterating the calibre of the artery, or, *vice versâ*, the course of the blood may be completely interrupted in the artery without producing any of the symptoms enumerated."

It is well known that Czermak, by pressing his vagus nerve against a small osseous tumour in his neck, was able to stop the beating of his heart.

I am indebted to Mr. Henry Morris for the following reference.

In the *London and Edinburgh Monthly Journal* for 1841 is a paper by Sir William Fergusson, entitled "Case of Aneurism of the Innominata treated by Ligature of the Right Carotid Artery, with Observations," in which this fact is clearly recorded. He says: "Pressure on the carotid opposite the larynx caused sudden diminution in the size of the swelling and singular slowness in the pulsations, with a feeling of giddiness, sickness, and faintishness. Pressure on the subclavian outside of the scaleni muscles caused less perceptible change, and produced no other marked effect. Simultaneous pressure on both vessels caused a rapid decrease in the size of the tumour; the skin over it wrinkled, and the pulsations seemed almost to cease" (p. 787). Further on he says, in describing the operation itself: "Having ascertained ..... that the patient had actually fainted on one occasion in consequence of pressure with the fingers in the course of the carotid, I resolved before tightening the ligature to mark the effects of obstructing the course of the blood in that vessel by itself, and accordingly when the needle was under the artery I ascertained by pressure with the forefinger that sudden obstruction produced no immediate remarkable symptom such as had been previously experienced." Again: "Before the patient was removed from the table, the tumour seemed slightly diminished in size, and the pulse in the right wrist was fuller and more bounding than it had been previous to the operation, and much more distinct than in the left" (p. 788). In commenting on these facts Sir Wm. Fergusson says: "I was the more prepossessed in favour of this operation [that is, ligature of the right carotid] by the more marked effects produced on the tumour, whilst pressure was applied in the course of the carotid, as well as by the pulse in the right wrist being less distinct than on the opposite side. Though on the first of these points (as similar symptoms were observed by pressing on the course of the left carotid) I had strong reason to suppose that the pressure caused its peculiar effects by its influence on the brain and on the action of the heart, or *vice versâ*, I deemed it most reasonable, considering that in all probability some favourable change was already going forward on the subclavian, to select the other branch of the innominata. It is worthy of

[1] Proceedings of the Royal Society, vol. ii., pp. 302-3.

remark that during the operation and after its completion the alarming symptoms which had caused me to hesitate about tightening the ligature on the carotid were proved to be not dependent on the obstruction of this vessel" (p. 793).

Although Sir Wm. Fergusson does not here recognise the influence of the pneumogastric nerve—it will be remembered that this was written in 1841—he says in the passage just quoted: "I had strong reason to suppose that the pressure caused its peculiar effects by its influence on the brain and on the action of the heart, or *vice versâ*." But the result of the operation itself demonstrated that the effect on the action of the heart and the circulation of pressure over the carotid could not have been due to a mere interruption of the blood-stream, for when the vessel was simply occluded the effect was not produced. Here is another instance of the value of accurately recorded facts, even though their interpretation is not reached at the time. I think, as we read this interesting case now, the demonstration must be considered to be tolerably complete.

It may be suggested that when the pneumogastric is thus pressed the sympathetic can hardly escape. But in several experiments I have made on this question, I have observed nothing which could be attributed to disturbance of the latter nerve when pressure is made on the neck over the common carotid artery, which would be of course at some distance below the angle of the jaw. I have not observed the preliminary disturbance of the heart's action with increase in the number of its pulsations referred to by Waller; and in these experiments the effect of pressure on the pneumogastric is shown by a reduction of the frequency rather than of the force of the heart's action. The following tracings, which, with many others, have been kindly taken for me y Mr. Haberahon, will illustrate this—

The vertical line, marked A, indicates the instant at which pressure was applied.

These results accord with those of the interrupted current. Although when a current of moderate strength is passed through the nerve the heart stops beating, yet with very weak currents the effect is much more in the direction of prolonging the diastole than of diminishing the extent of the systole. There is no actual arrest, but the pauses between the beats are prolonged, and the pulse is thereby rendered slow. And this is a distinction that requires attention, for when investigating the effect of pressure of the pneumogastric on the pulsation of an aneurism, a reduction of frequency only is apt, for obvious reasons, to suggest a reduction of force also. But although the experiment is by no means a difficult one, I have hardly ever seen the effect of pressure on the vagus so strikingly illustrated as in the instance I have related, and in this case it is not too much to say that knowledge of a great fact taught by physiology saved the surgeon from performing a useless and dangerous operation.

THE prize of £25 offered by the Royal Society of New South Wales for the best essay on "The Influence of the Australian Climates and Pastures on the Growth of Wool," has lately, we are informed, been awarded to Dr. Andrew Ross, M.L.A., of Molong.

PRELIMINARY NOTE ON THE

TREATMENT OF ZYMOTIC PYREXIA BY INHALATION, AND ON THE USE OF AMMONIATED CHLOROFORM.

BY BENJAMIN WARD RICHARDSON, M.D., F.R.S.

As far back as the year 1853 I treated at Mortlake a case of what we then called phagedænic croup by the inhalation of chloroform vapour in combination with the vapour of ammonia. There had been an epidemic of croup in the village, and in three fatal cases I had found, on post-portem inquiry, separation of fibrine in the heart, and had assigned the cause of death to the resultant obstruction. I was led, thereupon, to administer ammonia very freely, by the mouth, in such cases in order to maintain the fluidity of the blood. In the particular case to which I refer above the patient was a child six years of age, who absolutely refused to swallow medicinal doses of ammonia. In the house in which he lived there had been a death of another child from the disease, and as in this new case death seemed certain, I determined to administer the ammonia by inhalation in combination with chloroform, the parents of the child yielding a willing assent to what they felt was, in fact, a last chance. With very little trouble I produced a gentle narcotism with the combined vapours, and was then able to increase the quantity of ammonia considerably. I kept up the inhalation for fourteen hours, administering food by enemata. During the time of inhalation the late Dr. R. Willis, with whom I was then associated in practice, looked in several times and I sent a message to London to ask Dr. John Snow to come down and see the patient, a request with which he complied with his usual generous promptitude. In brief, the patient began to breathe with comparative ease within an hour after the commencement of the inhalation. In the course of three hours he had a loose cough, with expectoration, which was easily ejected, although there was continued sleep. The fever rapidly subsided, and, when the vapours were finally withdrawn, there was quick return of consciousness with complete subsidence of the acute symptoms. The recovery was rapid and complete.

While Dr. Snow was President of the Medical Society of London he called upon me one night to fill a gap by relating the particulars of the above case as "a casual communication" to the Society, and referred with commendation to the line of treatment I had carried out. He was also much interested in a theory I had formed at that time, to the effect that we ought to be able to control all the zymotic fevers by the process of inhalation, and while others considered the idea as visionary, he frequently encouraged, and even urged, me to follow it up by careful experimental research. I fear I have been too remiss in acting on this encouragement, but I have not neglected it altogether, and now I am recalling it more decisively.

In the way of such research I was once led to inquire what effect the vapours of ammonia and chloroform alone and combined had on putrefactive changes. I learned thereupon that each vapour in its separate state is a remarkable antiseptic, and that the two act admirably in combination. These facts have all been related in my lectures to the Society of Arts on the Preservation of Dead Animal Substances, and some of them formed the subject of a paper read during this session before the Medical Society of London, and yielded a demonstration of a specimen of blood which had been perfectly preserved in the fluid state, and free from any trace of decomposition, for a period of twenty years. In another series of researches conducted during 1867–70 I inquired what effect the vapours of chloroform and methylene bichloride and of many other vapours, alone and combined with vapour of ammonia, had on the temperature of warm-blooded animals.

Recently I have recurred to my original plan of administering chloroform vapour in combination with ammonia vapour in cases of zymotic fever, and as I have now made the administration exceedingly easy in practice, and as it seems to promise valuable results, I wish in this note to describe the method.

I take an alcoholic solution of ammonia (838 alcohol saturated with ammonia) and mix it in equal parts with chloroform or methylene bichloride. When the solutions

are mixed, any separation of water that may occur is removed, and in this way a clear mixture of ammoniated chloroform is obtained ready for use. In administering this compound by inhalation of the vapour, I put two fluid drachms of it into a small Wolf's bottle, and connect the bottle with a leather inhaler armed with an expiratory valve. The mouth-piece of the inhaler is held close to the mouth and the patient is instructed to inspire until bubbles of air are drawn pretty freely through the fluid in the bottle. The inhaler is in this manner charged with the vapours which are drawn into the lungs.

From the first the ammonia vapour is deprived of much of its pungency by the presence of the chloroform, and in time, as the narcotic begins to take effect, the pungency of the ammonia is covered so effectually that larger quantities of it can be inspired without cough or irritation. During the past week, in a puerperal case under the care of my friend, Dr. Rogers of Berners-street, in which I suggested this method in consultation, the patient inhaled freely every two hours for three days without the slightest discomfort and with obvious direct advantage. The effects of the inhalation seem to me to extend in four directions:—1. Under the sedative action of the narcotic relief from pain is obtained and repose, if not actual sleep, is secured. 2. Under the combined influence of the vapours there is reduction of temperature. 3. Under the influence of the ammonia there is a sustained fluidity of the blood and a production of freedom of secretion. 4. Under the action of the combined vapours there is an antiseptic result which is always favourable.

These are the points to which in this short paper I desire to call attention, dealing rather with a great and new principle of treatment than with its details. The principle is that through inhalation we should learn how to reduce zymotic fever at once, with direct precision, and without employing any of those medicinal agents which have to pass slowly into the system by absorption through the stomach, have to pass out of the system by slow elimination, and after all do not immediately command the position that ought immediately to be attained in the management of acute disease.

This principle once found to be correct, details will follow easily enough. I know at present of several vapours which reduce temperature more rapidly than those I have named, and I dare say there are vapours which are less complex than those, and yet possess the same properties. I can conceive again that in some forms of zymotic fever more or less alkaline vapour may be required than in other forms, and so on. These details will be subjects of independent and most interesting research. The end and object of such research, founded on the basis now suggested, will be to place living beings affected with what are now called fatal diseases of the acute type in such conditions that those human beings cannot die. I do not for a moment pretend that by the method I have here put forth we shall directly attain this goal, but I shall have played no bad part if I have taken a child's first step in so immortal a journey.

ON A

FORM OF LATE RICKETS ASSOCIATED WITH ALBUMINURIA, RICKETS OF ADOLESCENTS.

BY R. CLEMENT LUCAS, B.S. LOND., F.R.C.S.,

SENIOR ASSISTANT-SURGEON TO GUY'S HOSPITAL, AND TEACHER OF OPERATIVE AND PRACTICAL SURGERY IN THE MEDICAL SCHOOL; SURGEON TO THE EVELINA HOSPITAL FOR SICK CHILDREN.

My attention has lately been directed to a form of rickets occurring about the age of puberty, the true cause of which I do not think has been hitherto described or discovered. The first case that came under my notice was a pianoforte tuner, seventeen years of age, who consulted me in 1877 for lateral curvature of the spine. The constant elevation of the right arm in his employment had led to great projection of the right shoulder, and the double curve was well marked. His thorax was also distorted in the form known as pigeon-chested. There was some beading of the ribs and enlargement of the wrists. The pallor of the man led me to examine his urine, and I found that it gave a considerable precipitate of albumen on the addition of nitric acid. The true cause of the albuminuria I did not in the least suspect, and I lost sight of him without, I believe, rendering him any great benefit. Dr. Moxon published his paper on chronic intermittent albuminuria in the Guy's Hospital Reports for 1878, and, under the title of Albuminuria of Adolescents, alluded to the cause which, I think, will be found common to both this late rachitic condition which comes under the notice of the surgeon and the albuminuria, which has probably hitherto been more frequently detected by physicians. Since the publication of that paper I have from time to time occasionally detected albuminuria in cases of curved spine and bent bones; but it is only lately that I have learnt definitely that the phenomena of late rickets and albuminuria are too frequently connected to be matters of chance, and that the latter is often an important symptom indicating the cause of the former. The form of rickets which it is the object of this paper to point out, I would suggest, should be called the "rickets of adolescents," so as to associate its etiology with the albuminuria of adolescents pointed out by Dr. Moxon. It is possible that some may take exception to the term rickets as applied to these cases, but I have not the slightest doubt in my own mind that the general condition under consideration is essentially the same as that brought about in early life by defective diet and consequent mal-nutrition—factors which may be regarded as contributing to the rickets of adolescents. Late rickets presents certain differences from the rickets of early life dependent upon the greater maturity of the skeleton, and those who regard the disease as simply a bone affection may be slow to recognise its later manifestations. The enlargement of the epiphyses, as would be expected from their more extensive ossification, is never so great as in early life, and the disease more commonly shows itself first in a yielding of the ligaments rather than in a bending of the bones. The skull, too, which in early life presents under the influence of rachitic health such remarkable and characteristic changes, escapes when ossification is far advanced. A certain amount of enlargement of the epiphyses will, however, be generally observed, and, in severe cases, a considerable degree of bending of the bones. I do not think that it is yet generally recognised how many cases of lateral curvature have their origin in the rickets of early life, which may go on unrecognised till a new depressing influence causes the curvature to become more pronounced. There is still a wide-spread notion that only a general backward curvature results from rickets, whereas the spine may be predisposed by this disease to bend in any direction, and lateral curvature from rickets is not only not rare, but very common among children. Knock-knee and flat-foot are among the more common and earlier signs of the late rachitic condition, because, as I before remarked, the bones and their epiphyses, having become extensively ossified, do not so readily indicate the general change. A large proportion of the cases of lateral curvature in males, commencing about puberty or somewhat later, will come under this category, and in many albumen will be detected in the urine. Whether similar deformities which are frequently met with in growing girls are also associated with albuminuria I am unable to state, as the difficulties in out-patient practice of examining the urine of females are very great, and I have made no observations; but I have long been of opinion that the rachitic state of health which may be observed about the age of puberty is imperfectly accounted for by the temporary indispositions consequent upon the menstrual molimina. The author of the paper to which I have alluded had at the time of writing made no observations on females, and if the albuminuria of adolescents were confined to males, it might be a question how far a mixture of secretions with the urine was the cause; but from the quantity present and the early age at which it is sometimes found, the more probable explanation seems to be that the renal organs lie within the radius of sympathetic irritation.

The following cases of rickets of adolescents have recently come under my notice:—

A boy, aged fifteen years, who was employed in an insurance office, was brought by his mother among my out-patients at Guy's Hospital in January last. He had been ailing in health and growing gradually weaker during the last twelve months. He had complained of pain in the back, weakness of limbs, and general lassitude. Of late he had been unable to run up the steps of the office in which he was employed as errand boy. It was noticed that he was walking

on the inner side of his feet, and that his knees bent in. On examination we found that the epiphyses of his ankles were large, and that the arches of his feet had given way. He was also suffering to a slight extent from genu valgum. When his back was stripped we found that he had a quadruple curve in the spine, and there was also slight enlargement of the growing extremities of the ribs. His urine treated with nitric acid gave a large supernatant precipitate of albumen. This boy was cautioned as to his habits, and treated with phosphate of iron and cod-liver oil. In about two months the albumen disappeared, and he had sufficiently improved in health to return to his employment.

At the same time another boy, aged twelve years, came under my care at the Evelina Hospital for Sick Children, suffering in the same way. He had general bending of his spine, causing it to project backwards, his head dropping forward over his chest. There was slight general enlargement of the epiphyses. He was pale and vacant in manner. His mother brought him because his spine had grown out, and he was so weak that he was unable to do anything. He was treated in the same way, and cautioned as to his habits. He became much more upright in a few weeks, and was gradually gaining strength when last seen.

A third case came first among my out-patients at Guy's Hospital on April 12th. He was a lad, aged sixteen years, employed as a plumber, and sought advice on account of genu valgum on the right side, which had been giving way for twelve months. He had pigeon-chest and general enlargement of his epiphyses, but the arches of his feet had not yielded. On testing his urine with nitric acid, we found it contained a considerable quantity of albumen. He had enlarged tonsils and dilated pupils. He admitted his culpability, and was put on the same general treatment as the other cases.

A fourth case came among my out-patients at Guy's Hospital on April 19th. G. W——, aged fifteen, complained that he had suffered from aching pain and weakness of the right ankle for some months. He had spurious valgus of the right foot, with enlargement of the epiphyses of both ankles. His thorax was pigeon-chested, probably from old rickets. On testing his urine with nitric acid, it gave a well-marked precipitate of albumen.

The foregoing observations will indicate the inutility of merely treating deformities by means of splints and apparatus, as if they were but local affections. The rachitic condition of adolescents has usually one cause, which may be generally discovered by testing the urine. The discovery of albuminuria renders it easy for the practitioner to give such advice as may prevent this unhappy class from persisting in habits which would cause their deformities to become permanent.

Finsbury-square.

RUBEOLA:

EPIDEMIC ROSEOLA, RÖTHELN, SO-CALLED "GERMAN MEASLES."

BY W. TONGE-SMITH, M.D.,

LATE RESIDENT MEDICAL OFFICER TO THE LONDON FEVER HOSPITAL.

Founded on 145 Cases: Males, 65; Females, 80; under fifteen years, 13; above fifteen years, 132; oldest patient, female, fifty-four; Mortality, nil.

ESSENTIALLY a disease of adult life, rubeola frequently attacks those who are "capable" at the menstrual crisis; but this is not so generally the case as in scarlatina. Most cases occurred in the half year January to June, 1880, when both scarlatina and morbilli were very prevalent, and both at that time and subsequently these diseases were observed to occur simultaneously, or to follow each other in rapid succession in the same household. This, however, is not always the case.

Specific nature.—There can be no doubt that rubeola and scarlatina are distinct diseases. Case could be piled upon case to show that one does not protect against the other, and in my own experience there have been numerous instances of their following each other in the same patient at intervals of from three days to twelve months. That it is not identical with morbilli I have no doubt either, and clinically there is little difficulty in distinguishing them, but cases of their rapid succession in the same patient are not common, and therefore the difficulties of absolute proof are increased.

CASE 1.—E. B——, aged sixteen years, had morbilli in December, 1879; was admitted with rubeola in January, 1880, and developed scarlatina a few days later.

CASE 2.—In March, 1880, two sisters at a school had "the measles." A fortnight later two servants who had tended them in the early stage developed "the measles," and were sent to the fever hospital, where they were found to have rubeola. These were the only cases of illness in the school. In May, 1880, one of these young ladies was sent to the fever hospital with the measles (morbilli and pleuro-pneumonia), of which she died, and in November, 1880, the other sister was admitted with scarlatina, which followed an ordinary course.

CASE 3.—E. O——, aged sixteen years, had scarlatina in January, 1882, rubeola in April, 1882, and severe morbilli in May, 1882.

CASE 4.—J. O——, aged four years, had scarlatina in January, 1882, rubeola in March, 1882, and morbilli in June, 1882.

CASE 5.—H. O——, aged three years, had scarlatina in January, 1882; rubeola in March, 1882; and morbilli in June, 1882.

Cases 3, 4, and 5 were sisters, and members of a household of nineteen. Nine had scarlatina and four scarlatinal sore-throat in January, 1882; nine had rubeola in March, April, and May, 1882; and five had morbilli in May and June, 1882. Except these last five, the rest of the household had had morbilli previously.

Infectiousness.—The cases reported in these notes show this very clearly. My experience would lead me to regard morbilli as most infectious, scarlatina as longest so, and rubeola as least so both in potency and duration. The accidental introduction of morbilli into the scarlet fever wards (two-thirds children) caused me upon one occasion more trouble and anxiety than all my other duties combined. The coughing and sneezing child infects the air far and wide before the rash appears, and, unless the most stringent and early measures are adopted for its suppression, the disease makes rapid headway. Scarlatina, however, under corresponding circumstances, will not spread if the patient and his immediate surroundings be removed, the bedstead, &c., scrubbed with some disinfectant, and a plentiful supply of fresh air secured. With rubeola, the removal of the patient, though advisable, is not necessary, provided his bedding, &c., can be kept absolutely distinct, and others kept away from his bedside, and plenty of fresh air be obtained. In about a week he may safely mix with others. These remarks are based upon actual practice.

At the London Fever Hospital, where from want of funds the committee had to force the medical staff to treat in the same wards rubeola, morbilli, typhus, enteric, diphtheria, doubtful cases, and other diseases—such as pneumonia, &c.—only one patient (suffering from enteric) contracted rubeola, and one (suffering from rubeola) morbilli. Nevertheless, in about two years over 500 patients were treated in these wards. It is not difficult to understand why morbilli spread only once, for this disease is essentially one of childhood, and most of the other patients were adults, and even when children had already had that affection. The mildness and brevity, or absence, of all the real or supposed sources of infection—catarrh, sore-throat, discharges, desquamation—reduce rubeola almost to the category of the strictly contagious disorders, and put it on a par with diphtheria, hence the precautions indicated above proved sufficient. It would be unfair to infer from this any identity between morbilli and rubeola, just as it would be to do so between these and enteric typhus, or diphtheria, for neither did either of these ever spread except to nurses and other direct attendants upon the sick. With regard to typhus, I never had more than two cases in the same ward at one time. To the nurses was the credit due, for by devotion to duty and loyalty to the medical officers they were unremitting in their endeavours to keep the bedding, &c., separate, and to "boycot" these diseases. The building in which these 500 odd mixed cases had to be treated is from window to window nine feet from the female scarlet fever wards (through which there passed during the same period over 800 cases), and connected to them by a covered corridor; and yet not once did scarlet fever spread to that building, notwithstanding that the physicians, the assistant resident medical officer, the matron, the night superintendent, and myself especially went freely from one to the other. With facts like these before one it is impossible

not to regret that it has ever been thought opportune by exaggerations to frighten the public out of its senses about infection, with the result, which ought to have been foreseen, of making it now almost impossible to extend such necessary and harmless institutions.

Incubation, fourteen days (?).

CASE 1.—Miss R——, a governess, tended her mother and sister with rubeola on March 2nd, 1882, only, and then went home to her pupils. On March 16th she developed rubeola, was removed to hospital, and her room fumigated.

CASES 2 and 3.—J. O—— and C. O——, pupils of above, developed rubeola on March 30th, and were kept at home.

CASE 4.—E. O——, sister of above, left home on April 9th, not having come herself into contact with the preceding, and returned on April 16th, 1882. Next day (17th) she developed rubeola, was removed to hospital, and her room fumigated.

CASES 5, 6, and 7.—Later the same day, April 17th, three other sisters developed rubeola.

CASES 8 and 9.—Yet two more sisters developed rubeola on May 1st, 1882.

CASE 10.—E. J——, exposed to contagion on April 17th, 1882, developed rubeola on May 1st, 1882.

The two servants alluded to in a preceding case developed rubeola, according to their tale, fourteen days after exposure to infection.

Clinical history.—The onset is sudden, but there is no sense of illness, and the symptoms are trivial, so that they do not attract much attention at the time. When the disease is developed, however, the patient on looking back has no difficulty in fixing exactly the time of its commencement. Chilliness and indescribable pains and aches of no great moment, slight headache and heaviness, slight cough, slight sneezing and running at the nose, slight conjunctival injection and photophobia with a feeling of sand in the eyes, slight sore-throat, stiffness of the neck, with "lumps" like marbles, followed quickly by "spots" on the face, may either of them be the initial symptom. Some or all are sure to be met with quite early. Often the rash is the first thing which attracts attention; this is generally the case when the patient, having gone to bed in his usual health, awakes with the disease. Some of the above symptoms have no doubt preceded the rash, but have been unobserved during the night on account of their mildness, for patients will then say that the night was a restless one. Be this as it may with a rash, no matter how soon it is observed, there will always be some of the signs, however variously grouped. The catarrhal are the only symptoms that I have known distinctly delayed until after the appearance of the rash. There are the ordinary signs of pyrexia, commonly trivial in character. Very frequently the temperature does not exceed, or even reach, 100° F.; rarely does it rise above 100° to 102° F. It falls very rapidly, and is normal before the rash fades. The pulse is seldom above 100, and regains the normal even before the temperature falls. The bowels are little affected, and variously. Cough may become short and hacking, and there may be a few râles scattered over the chest. Except the enlarged glands, usually first to appear and last to go, cough persists longest.

Nearly always by the third or fourth day nothing remains but the "lumps," and, perhaps, a little cough, and slight powdering of the face, neck, and shoulders, rarely more, often not even that. The tongue is thinly furred, and presents at its tip about a dozen enlarged papillæ, as if the organ had been protruded to pick up so many grains of Cayenne pepper. It cleans, but does not peel, as in scarlatina. The primary condition of the throat is little more than mere redness and dryness; no swelling and no ulceration, and usually it has disappeared in a couple of days. It may, however, continue to become merged in the secondary affection, should this be early. Probably all the lymphatic glands are enlarged. Those commonly affected so as to be distinctly felt are the post-auricular, the sub-occipital, the glandulæ concatenatæ, and the inguinal; less frequently the axillary, and rarely the popliteal, and that at the bend of the elbow. I have known all these, however. In morbilli and scarlatina the glandulæ concatenatæ and inguinal may be enlarged, and then there is a difference between the two sides. The others I have not known implicated in these affections, except as the result of chronic disease. The glands are enlarged singly, and each can be felt distinct from its fellows; masses are not formed, they never attain a large size, but roll like marbles under the fingers; symmetry is observed and is important, and suppuration does not occur. Tender to the touch, they give rise to the early stiffness of the neck, and sometimes occasion actual pain.

The rash appears usually almost simultaneously with the onset, attains its height in twenty-four hours, is "blurred" on the second day, and is gone on the third. Essentially it is fugitive. It may slip more quickly away; rarely does it linger on. In severer cases it is more likely to persist till the third or perhaps the fourth day, and may leave stains; or (in one case only complicated by diphtheria) to the fifth day and become petechial. It appears as "spots" first upon the face, and extends to the tips of the lips (never the case in scarlatina), and then rapidly to the trunk and upper parts of the extremities, especially on their inner aspects—not often to the legs, forearms, hands, and feet. It consists of "spots," composed of groups of papules of a light-violet or pinkish tint, contrasting with the dark-violet or almost livid hue of the morbilli. They are irregular in shape, and remain discrete at first, and then in arrangement the rash is like that of morbilli on a small scale. In these diseases patients speak of "the spots," while in scarlatina they speak of the "rash." Soon the "spots" begin to run together, and to lose their raised character; and in fading the colour becomes lighter, and the rash "blurred," so as to be of itself indistinguishable from scarlatina. This change in arrangement (not in colour, of course) may be compared to that produced by rubbing over with the dry hand a lot of dots made on an ordinary slate with pencil. This "blurred" or "smudged" appearance is seen chiefly, or almost altogether, upon the trunk, and is most marked at the epigastrium about the end of the second or the third day, when the rash has faded, or nearly so, elsewhere. In severer cases the rash is darker in colour, and does not become so readily confluent (except in one case, that with diphtheria, in which it formed a complete covering to the body), and then it is more like morbilli, and sometimes shows a suspicion of vesicles. Usually it is very sparse, and remains discrete when present on the lower parts of the extremities. Desquamation, if any, is rarely more than a mere powdering of the face, neck, and chest, and is over by the end of the first week. I have seen branny desquamation of the arms, nevertheless.

(To be concluded.)

A CASE OF HEMIPARAPLEGIA SPINALIS;

WITH REMARKS ON MUSCULAR SENSE, ETC.

BY JAMES MACKENZIE, M.D.

N. P——, aged thirty-eight, a baker, when examined on Dec. 13th, 1880, complained of loss of power in the left leg, want of feeling in the right leg, and difficulty in evacuating his bladder and rectum.

History of the present attack.—In the month of June, 1880, the patient became conscious of an indefinite numb feeling at times creeping over the right leg. In the following month the sexual power disappeared, and a little later he began to experience a difficulty in voiding urine, till ultimately he could pass but a few drops. Catheterisation having been resorted to, a large quantity of urine was drawn off. He himself used the catheter for three weeks, when a partial return of the bladder control caused him to desist. A difficulty in getting the bowels moved manifested itself at the same time, for which castor oil and injections were unavailingly tried. Obtaining no relief, he one day passed his finger into the bowel, and, slowly withdrawing it, the fæces followed. He says there is a constant bearing-down sensation, as if the bowels required relieving, but without the above device this cannot be done. A month ago the left leg became weak, a symptom which has increased so that during the last ten days he has had to trail it behind him as he walked. His previous health has been good, and nothing of importance was elicited from an inquiry into his social condition and family history.

Present condition.—Patient is 5 ft. 7 in. in height, well built and muscular, and of fair complexion. The skin is moist and warm. Temperature is natural, no detectable elevation in either leg. There are two small cicatrices in the left groin, which he says followed upon a blow on the testicle twelve years ago. With apparent sincerity he denies the possibility of a chancre, though he admits having acquired a gonorrhœa about this period. I cannot detect any

cicatrix on the penis. Of possible specific sequelæ there is only a statement of his hair falling off in considerable quantity some years ago. On the outer and upper part of the right leg there is a large red inflamed patch, six inches by three, with a blister the size of a florin in the centre. The patient was unaware of this condition till I called his attention to it. After conjecturing for a time what might be the cause, he remembered that while on a low stool, that morning, he discovered that his bare knee was almost touching the bars of the grate, in which a good fire was burning. From inquiry into the position and posture of the patient I had no doubt that this was the cause.

Nervous system; motor.—The patient as he lies in bed is generally raised to almost a sitting posture, with his legs laid straight out before him. The voluntary movements at all the joints of the left leg are weakly performed, and their extent limited. The voluntary movements on the right leg are strong and good. The patient with difficulty gets out of bed, having to assist the left leg in its progress with his hands. When standing he has to balance himself with the aid of convenient objects. He can walk, but does so trailing the left leg in the manner of an ordinary hemiplegic. Standing with his heels together he sways from side to side and before backwards, and ultimately falls, usually to the left side. During the time he is standing there is observed an ever-changing contraction and relaxation of the tendons of the right foot and leg as he attempts to steady himself. These movements are similar to those in the leg of a man who attempts to stand on that leg alone. There is no action whatever to be seen or felt in the tendons of the left leg. When he recovers himself from the inevitable stumble there follows a series of clonic contractions of the left quadriceps muscle. No motor abnormalities are observable in any other part of the body.

Sensory.—The patient complains of a numbness in the right leg and belly as high as the twelfth rib. On the left side all the cutaneous sensations are natural. Sense of touch on the right leg:—he localised with considerable accuracy any spot touched. He is unable to distinguish two points applied at once, thinks there is but one, and indicates its site as some place between the two points. Even when the points are a foot distant, it is only after pressing hard and waiting some time that he becomes aware that there are two points being acted upon. Senses of pain and temperature are almost entirely abolished, as indicated by the above-mentioned burn, still he is vaguely conscious of these sensations when his mind is actively engaged in searching for them. These abnormalities extend all over the right leg, the right side of the abdomen to a short distance above the symphysis pubis, slanting upwards and outwards to the level of the twelfth dorsal vertebra, but become less marked towards the upper portion. They are also limited to the right side of the scrotum and penis, the mucous membrane of the urethra as well as the skin exhibiting the diminished sensations.

Reflex.—(1) Skin: On tickling the sole of the left foot the movements consequent are exaggerated; right foot natural. (2) Tendinous: The patellar is very much exaggerated. It is not set up by striking the bones in the neighbourhood, provided that the tissues connected with the tendon be not stretched by the blow. Slight reflexions also got in tibialis anticus, extensor pollicis, and extensor communis digitorum. Ankle clonus readily set up. The patient knows easily where his legs are placed. Examination of the spine and cranium reveals no abnormality. The special senses are quite normal, and the mental condition perfectly clear.

Genito-urinary system.—Micturates frequently, and with some difficulty. Since he has been able to pass water, and left off catheterising, he has had to perform the act bending forward and straining hard. After he had evacuated the bladder to his own satisfaction, I detected by percussion that it was not empty, and on passing the catheter drew off several ounces of urine. He has no pain in this region, and the urine betrays no chemical or microscopical abnormality. The sexual functions still in abeyance.

Digestive system.—Tongue clean, and swallows well. Has a good appetite, and no discomfort after food. The bowels cannot be moved save by the afore-mentioned device. Purgatives he has taken in large quantities. On rectal examination with the finger, I found that the sphincter yielded more readily than natural.

Towards the end of January, 1881, the patient became worse. He then exhibited the phenomena of hyperæsthetic bands encircling the abdomen—the hyperæsthetic portion in the left side being broader and a little higher than that of the right. The bands could not be distinctly mapped out owing to the variability of the impressions produced. Thus, having enclosed in ink spaces where the patient declares he feels the pricking of a pin much less than natural, I proceeded to other places. On returning to the first spaces, I find from his starting and exclamations of pain that they have become hyperæsthetic. The dulled impressions are all either in the upper part of the hyperæsthetic area, or slightly above, where they occasionally intermit with the natural, about the level of the ninth rib on the left side, and the tenth on the right. I have been unable to map out the areas on account of the extreme variability of the impressions.

The sense of touch is all but gone, and in the right leg he can only tell that he is being touched provided that the object remains in contact with the skin for some little time. In like manner the other tests exhibit almost total abolition of sensation. The left leg exhibits a slight diminution of the sense of touch, but other sensations are quite natural. He is now unable to tell in what position his legs are placed, and is utterly at fault in discriminating between weights in both legs. The tendon-reflex is much exaggerated in both legs, more especially in the left. He is unable to walk, declaring that when he gets out of bed he does not know where his legs are, and is in constant danger of falling from the sudden uncontrollable jerkings of the left leg. Otherwise the voluntary power over the legs is in much the same condition as in the previous description. Percussion over the spine elicits symptoms of considerable tenderness over the eleventh and twelfth dorsal vertebræ and first lumbar vertebra. Electrical stimulation with both currents reveals no abnormality in the muscular contraction. The sensation to this stimulation is absent in the right leg, but natural in the left. After this he was put upon antisyphilitic remedies, first the iodide of potassium, and afterwards a course of mercurials by inunction, till the physiological symptoms were developed. He gradually improved, and a year later his condition was as follows:—

Examined Feb. 25th, 1882.—His general health is very good, and he has latterly been increasing in weight. Circulatory and respiratory systems are healthy. *Nervous system.*—Motor: Voluntary power of executing movements at the joints of the left leg is small. Passive movements are resisted, more especially at the knee. The right leg is powerful, and under complete control, and passive movements unrestrained. In walking he trails the left leg. Sensory: Right leg always feels cold, and when he himself is cold he feels as if cold water were running down his right leg. The sensibility to simple touch, however lightly applied, is good on both sides, and he localises accurately the spot touched. Tickling good on left; on the right diminished at the sole, and above the knee for some distance, and is nearly absent over the intermediate part of the leg. Pain natural in left leg; diminished and delayed on right. On both legs he can distinguish pinching from pricking. The sensibility to pain becomes about equal on both sides at the groin, but there is still a marked diminution of the sensibility on the right side of the penis and scrotum. He recognises separate points to within three inches on the left leg, but they have to be many inches asunder before he can distinguish them on the right. Temperature: He is unable to distinguish cold test tubes from hot on the right leg, and the inability to distinguish extends as high as the level of the pelvic brim on the abdomen. Reflex.—Skin: On tickling left sole sensation is natural; muscular response diminished. Right sole movement natural; sensation diminished. Tendon: this is exaggerated on both sides; the tendons at the ankle are all susceptible, including the tibialis anticus; a few of these (tibialis anticus and extensor longus pollicis) contract on tapping the bones in the neighbourhood. Sense of position: Is a little out of his reckoning with left leg, but accurate with the right. Weights: Very accurate with right leg; with the left leg he can discriminate between 1 lb. and 2 lb., and tell their relative weights, but 5 lb. he can scarcely lift, and thinks that there is about 20 lb. resisting him. Galvanism: Cutaneous sensation diminished in the right leg; muscles contract equally and naturally in both legs. There is no diminution in the bulk of the legs on comparing present measurements with those taken a year ago. Genito-urinary: There is considerable difficulty in micturating, and he accomplishes the act by two methods. In the one case he stands supported, stooping slightly forward, with the left leg thrown backwards and outwards. After a time a drop of urine escapes, followed soon by a few drops

more, and latterly by a fair stream, but projected with little force. If he should talk during the act the flow stops, and he has to strain to get it to resume. He cannot tell when the stream stops or when it flows save by watching it. A few ounces are left in the bladder after the completion of the act by this method. In the other method he assumes a sitting posture, and passing his finger into the rectum there immediately ensues a full and forcible stream of urine. It generally stops soon after the finger is withdrawn, and is excited by its reintroduction. Neither by this method is he aware from urethral sensations that he voids urine. In this way the bladder can be completely emptied. The power of coitus is still in abeyance. Digestive: Tongue clean; no discomfort after meals and appetite fair. The bowels are very costive, and he has to take castor oil frequently in order to get a liquid motion, otherwise the fæces become hard and lodge in the rectum, whence they have to be displaced with the finger. On passing the finger into the rectum the sphincter is found laxer than natural, yet there is no incontinence.

The diagnosis in this case points to a syphilitic gummatous tumour, situated either in the substance of, or in the sheath and pressing into, the left half of the spinal cord at the upper part of the lumbar enlargement. Latterly the gumma having in all likelihood been absorbed has left the tissues permanently damaged.

(*To be concluded.*)

ORCHITIS, WITH SLOUGH OF A PORTION OF THE TESTICLE, FOLLOWING TYPHOID FEVER.

BY C. E. HARRISON, M.B. LOND., F.R.C.S.,
SURGEON, 2ND BATTALION, GRENADIER GUARDS.

MR. X——, having passed through the fatigues and exposure of the recent campaign in Egypt, arrived at Cairo with his battalion on September 17th. On the 27th, having felt unwell for some days previously, he was seized with intense headache, high temperature, and other febrile symptoms, which, after running a somewhat irregular course, developed the characteristic features of typhoid fever. The rose-spots, the character of the dejections, condition of the tongue, enlargement of the spleen, and pulmonary congestion were all marked. On October 27th he was considered sufficiently convalescent, although still weak, to leave Cairo by river steamer for Alexandria, travelling thence to England in a hospital ship. There was some return of diarrhœa during the voyage home, and on his arrival in England on November 14th he was exposed to the cold east wind then prevailing. On the following day his temperature was 99·2°, and there was some looseness of the bowels. On the afternoon of the 16th he was suddenly seized with pain in the right testicle, which became very acute during the night. On the 17th I found the testicle considerably enlarged, with redness and œdema of the scrotum. The epididymis was but little affected. There was no gleet or history of urethral discharge, and no local injury could account for the acute orchitis. Considering his weak state of health, it was deemed unadvisable to abstract blood. Fomentations with poultices and extract of belladonna were applied, and a saline mixture, with an opiate at night, was ordered. On Nov. 18th the patient experienced considerable pain in the testicle, which came on in paroxysms. There was some fulness and tenderness in the line of the spermatic cord. Temperature 102·8°. On the 21st the temperature was 101·4°; pulse 96; slight shivering. On the 27th indistinct fluctuation was felt. Sir James Paget, who had seen the patient on the 21st, approved of an exploration being made with the needle of an hypodermic syringe, but the presence of pus was not detected. This is probably accounted for by the needle having passed into a portion of dead tissue which was subsequently thrown off as a slough. On Dec. 13th the fluctuation was distinct. Two incisions were made, but little pus was evacuated. On the 14th the temperature was 99°. A small portion of slough presented between the edges of the upper wound, and this continued to increase in size, being gradually extruded. Having reached the size of an almond, the slough finally came away at the end of the month, and the wounds completely healed. At the present time the testicle is considerably diminished in size, but no further trouble has resulted.

To those interested in this rare sequela of typhoid fever, an interesting paper by M. Widal, and a discussion on the subject, will be found in the "Bulletin de la Société Clin. de Paris," 1877–78, p. 142. M. Dieulafoy here mentions that he has seen a case of suppuration, and that M. Chedevergne has reported another. Various causes to account for the complication are here suggested. M. Vallin suggests catarrhal inflammation of the seminiferous ducts; M. Vidal, thrombosis of the spermatic veins; M. Hallopeau, parenchymatous lesion rendering the organ susceptible of injury. In the same volume, p. 229, M. Sabourin reports a case. In the "Archives Générales de Médecine," 1878, vol. ii., p. 595, M. Hanot reports several cases, one case being almost identical with the subject of the present report. M. Paul Larquier published a thesis in 1882, entitled "L'Orchite dans la Fièvre Typhoïde." Dr. Marston in his excellent paper on the fevers of Malta and the Mediterranean in the reports of the Army Medical Department, 1861, speaks of rheumatic orchitis as occurring after the Mediterranean remittent fever. He mentions one case of suppuration. Dr. Duffey's paper (in the *Dublin Journal*, 1872, vol. i., p. 97) was referred to in your issue of Dec. 9th. Prof. A. Liebermeister, in Ziemssen's Cyclopædia, vol. i., p. 181, speaks of the complication, but observes, "All the cases that I ever saw ran a very slight course." As to the cause, may not orchitis be closely allied to parotitis, which is also a sequela of typhoid, and may not both be described as an expression of blood-poisoning?

Wellington Barracks.

THE LIGATURE-TIGHTENER.

BY JOHN CLAY, M.R.C.S. &c.,
OBSTETRIC SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

THE instrument represented in the accompanying woodcut is devised, as its name indicates, for the purpose of tightening and securing a ligature applied to a structure so situated that the fingers cannot be efficiently used to tighten it; or of being applied to a morbid growth, the size of which may require greater constricting power than can be produced with the fingers alone. The ligature recommended is one composed of five or six strands of the best white thread, the strands being from fifteen to eighteen inches in length. The ligature is passed twice round the part to be tied, as shown in the woodcut. The ends of the ligature are fastened to the stem of the instrument, which is then worked as an ordinary wire-rope écraseur. If the ligature is properly applied to the part, no second tying of it is required. Ordinary single ligatures may be tightened by the instrument. Wire may be used to constrict a morbid growth, either temporarily or permanently, before removal. The wire is applied singly around the growth, and is crossed before fixing it to the instrument. When sufficient constricting power has been produced, the wire is twisted by making two or three turns of the whole instrument. The instrument has proved very useful in a subperitoneal pedunculated growth of the uterus, and in two cases of uterine epithelioma. In a highly vascular growth of the rectum, in a female, it was found highly efficient in controlling the severe hæmorrhage which ensued after the growth had been transfixed and tied in two portions. The instrument was made for me by Messrs. Mappin and Co., surgical instrument manufacturers, New-street, Birmingham.

Birmingham.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

PARALYSIS OF THE SERRATUS MAGNUS AND RHOMBOID; ELECTRICITY; IMPROVEMENT; REMARKS.

(Under the care of Dr. FERRIER.)

FOR the report of the following case we are indebted to Dr. Norman Dalton, medical registrar:—

John C——, aged forty-four, presented himself at the out-patient department of this hospital on March 29th, complaining of weakness in the right upper limb. His attention had been drawn to an undue prominence of the right shoulder blade. The following notes were taken:—The patient works in a foundry at Woolwich and occasionally has the mixing of metals, including lead, but the latter only in small quantities. He has never had colic and there is no definite blue line on the gums. As a rule he works with a hammer all day, using the right arm only. He has been a free drinker all his life, and states that he had an attack of delirium tremens six or seven years ago. With this exception he has had excellent health. He has never had syphilis or ague, and he has never suffered from neuralgic pains. About eight weeks ago, on a Sunday, he found on waking that he had completely lost the use of his right upper limb. He could not raise his hand to his mouth nor remove his arm from his side. He had gone to bed feeling quite well, and neither before nor since has his general health suffered in any way. He is quite certain that no feverishness or other general symptom preceded or accompanied the onset of the paralysis. There was no draught in his bedroom, and his position during sleep had not been in any way cramped. He had had no blow on the shoulder. Besides the loss of power he had some pain in the muscles of the right upper arm and over the shoulder blade on the same side. There was no loss of sensation in the affected limb, and he has had no twitching of the muscles.

On the Monday his condition remained about the same, but on Tuesday he had recovered sufficiently to return to work, and use the hammer with his right arm. In about a week he had completely recovered the use of his forearm, but the limb as a whole remained weak. He noticed this particularly when he had to push before him any heavy object (e.g., a truck). His fellow-workmen remarked that when at work his right shoulder-blade projected to an unusual extent, and he himself noticed that on leaning back in a chair, the right shoulder-blade was the first to touch the back, so that the lower angle became sore.

On stripping the patient his general muscular development was found to be good. There was no appreciable difference in size between the muscles on either side, except that the inferior digitations of the serratus magnus were very evident on the left side, and absent on the right. This became more evident on making the patient rapidly extend his arms forwards (as in striking straight from the shoulder), when the digitations on the left side started up into marked prominence, while those on the right did not become visible. This movement was also executed more forcibly with the left than with the right arm. On examining the back (his arms hanging by his side) it was found that the distance from the posterior border of the scapula to the middle line was as nearly as possible equal on the two sides. There was slight flattening in the position of the right rhomboid muscles. The angle of the right scapula was about one inch lower than the left; and, compared with the latter, it made a very marked projection, and its outline was much more evident. He could raise both arms with equal facility to a position at right angles to the trunk and in the same plane. In this position the prominence of the right scapula became more marked, it being possible to introduce the fingers between the lower angle and the ribs from behind. The left arm could be raised straight up above the head, while the right could scarcely be raised beyond the position at right angles to the trunk. On lifting the arm with the hand it could be raised to the same position as the left arm without difficulty and without causing pain, the structures about the joint offering no resistance. The undue prominence of the right scapula was most marked when he stood with both arms extended forwards at right angles to the trunk. In this position the whole bone stood out like a veritable hump on the right side of the back. The reaction of the right serratus magnus and of the right rhomboid muscles to the interrupted current was distinctly diminished, while their reaction to the constant current was increased. There was also qualitative change in the reactions, and the contractions were of the sluggish form seen in the reaction of degeneration. The other muscles on the right side, including the trapezium and the levator anguli scapulæ, gave normal reactions, as did all the muscles on the left side. The urine contained about one-eighth albumen.

On April 12th the following note was made:—Under the influence of general treatment and occasional applications of electricity, faradaic and galvanic, the patient has steadily improved. He can now raise the right arm considerably beyond the position at right angles to the trunk. Faradaic excitability of the right rhomboids and serratus magnus has slightly improved (?). Their galvanic excitability is increased, the reaction being sluggish. ACC = CCC. On April 26th he was seen again, and the affected muscles showed further signs of improvement.

Remarks by Dr. FERRIER.—Dr. Ferrier considered that this was a case of combined paralysis of the serratus magnus and rhomboid, resulting in all probability, as not unfrequently happens, from over-exertion. Though the patient was in some measure exposed to lead poisoning in his work, yet there was no indication of any of the toxic effects of lead otherwise. That the paralysis did not depend on a limited anterior polio-myelitis was shown in the entire freedom of the deltoid and other muscles which are innervated from the same segment of the spinal cord and its corresponding motor root. The cause of the paralysis was therefore most probably a peripheral affection of the nerves of the serratus magnus and rhomboid, induced by the constant strain and fatigue involved in the patient's occupation. The serratus magnus occasionally suffers alone, and some discussion has taken place as to the exact position which the scapula assumes under such conditions. Perhaps in some of the cases described the conjoint affection of the rhomboid has been overlooked. When the serratus magnus alone is paralysed, the posterior border of the scapula is drawn nearer the vertebral column, and the inferior angle is somewhat raised and stands off the thoracic wall. This deformity, as has been well explained by Seeligmüller, is due to the unantagonised action of the rhomboid, together with the action of the muscles attached to the coracoid process. In this case, when the arm was hanging quietly by the side, there was no appreciable difference between the distance of the two scapulæ from the vertebral column, and the right inferior angle was somewhat lower than the left. This was clearly due to the conjoint paralysis of the rhomboid. Had this not also been paralysed the deformity described by Berger and others would undoubtedly have occurred. But the deformity was brought out in a most striking and pronounced manner when the arm was extended forward and slightly adducted. The scapula then turned on a horizontal axis passing through the spine, by the agency of the muscles attached to the coracoid process, and the posterior border not being kept applied to the thoracic wall, owing to the paralysis of the serratus magnus, stood off like a wing. The electrical reactions of the affected muscles were such as are characteristic either of peripheral paralysis or of anterior polio-myelitis. The comparatively rapid recovery was such as is seen in the milder forms of peripheral nerve lesion.

MANCHESTER WORKHOUSE HOSPITAL.

NOTES ON A COMPLICATED CASE OF ACUTE RHEUMATISM; ERYTHEMA TUBERCULATUM; ACUTE TONSILLITIS; DYSPHAGIA AND DYSPNŒA; TRACHEOTOMY; BRONCHO-PNEUMONIA; RECOVERY; REMARKS.

FOR the report of the following notes we are indebted to Mr. C. B. Voisey, M.R.C.S., resident assistant medical officer.

M. H——, aged thirty-one, married, labourer, was admitted on Nov. 14th, suffering from rheumatic fever, which he attributed to exposure to wet and cold a few days previously. For ten days before admission he had been in bed at home, suffering intense pain in the joints, and for one or two days

was covered with a red and irritable rash, which he described as similar to the one (erythema tuberculatum) that developed during the time he was in hospital. Temperature on admission 103·4°. No albumen in the urine.

The notes taken on admission were as follows:—He was a man of intemperate habits, and had syphilis twelve years ago; but he appeared strong and had never suffered from any acute illness except an attack of pleurisy last Whitsuntide, which confined him to bed for three weeks. His father and mother are both dead. The former suffered severely from rheumatism; the latter and a sister died from consumption; of the other eleven children only one brother is living. From Nov. 14th to 25th inclusive, the case was one of ordinary acute rheumatism, progressing favourably under the ordinary treatment by twenty-grain doses of salicylate of soda and bicarbonate of potash every three hours. The pain and swelling disappeared from the affected joints (knees and wrists) on the 18th (when the medicine was ordered to be taken thrice daily), when the temperature was normal. On the 26th, acute inflammation of the left tonsil developed (temperature 103·2°; pulse 120); and the symptoms became so urgent during the succeeding twenty-four hours, owing to the rapid increase in the size of the gland, that repeated scarification was practised, and the patient placed in a steam-tent. About this time, too, the body was observed to be covered with a deep rose-coloured rash, consisting of round or oval elevated patches of skin, varying from an inch to two inches in diameter (erythema tuberculatum), most marked over the chest and arms and least so on the legs. Subjacent and slightly adherent to many of the erythematous patches hard nodules were developed in the subcutaneous tissue, which were quite free from attachment to the deeper structures. Such a patch, as described, was situated upon the outer half of the upper and lower eyelids of the left side, involving the neighbouring tissue for about three-quarters of an inch. Another was observed on the outer side of the left arm. The backs of both hands were similarly affected. The dyspnœa and dysphagia were only temporarily relieved after each scarification of the tonsil by the removal of large quantities of thick tenacious mucus from the distended follicles; and on the following day (the 27th) the patient's condition became so critical that Mr. James Hardie, the medical officer, performed tracheotomy to prevent immediate aphyxia. After the operation the patient was again placed in a steam-tent, and obtained speedy relief. The erythematous patches and subcutaneous nodules had now lost much of their prominence, and the patches were fast fading. From the time the tonsil became inflamed it was necessary to administer nutrient enemata of milk, egg, and whisky, in which a dose of the medicine was placed, every three hours. On the morning of the 28th the only remaining indications of the erythema were a number of bruise-like cutaneous discolourations; but now erysipelas made its appearance on the bridge of the nose, and, during the two following days, had spread rapidly upwards on to the scalp and down over the face. Tincture of perchloride of iron and sulphate of quinine were now prescribed, and by this time the tonsillitis had sufficiently subsided to allow of both medicine and nutriment being taken by the mouth. On the evening of the 30th tightness and constriction across the front of the chest were complained of. An examination revealed rhonchi all over both lungs with dulness and tubercular breathing at the bases posteriorly. Temperature 104·8°; pulse 120. With the subsidence of the erysipelas the lung symptoms became more marked, the cough being very troublesome, the expectoration free and rusty, and the breathing rapid and difficult. The condition of the patient at this time was very critical, owing in part to the lung complication and in part to the inability to take sufficient nourishment, for the tonsil was still slightly enlarged, and the incisions previously made into its substance had assumed a very unhealthy and sloughy appearance, and were such as to render the act of deglutition extremely painful, if not indeed absolutely impossible. The heart too showed signs of weakness, as indicated by the pulse and the appearance of œdema on the backs of both hands; none in the feet. A careful stethoscopic examination on several previous occasions failed to detect any murmur, and even now only the slightest blowing can be heard over the apex accompanying the first sound. The heart was enlarged, the apex beat being on a level with the nipple line. The occurrence of dropsy in the hands and not in the feet may possibly be explained by the fact of the tissues in the former having been injured by the erythema, &c., and consequently more unhealthy and predisposed to œdema.

An examination of the urine on Nov. 29th led to the discovery of merely a trace of albumen, which could easily be accounted for by the high fever; no casts. By Dec. 7th the pulse was very weak, and an attempt to sit up in bed brought on an attack of syncope. The lung complication was treated locally by hot applications to the chest and by the internal administration of a mixture containing tincture of digitalis, tincture of squills, and carbonate of ammonia every three hours. The patient gradually improved, the first manifestation of improvement being indicated by the pulse becoming stronger and more regular, and the dropsy disappearing from the upper extremities. Henceforward convalescence was uninterrupted, and on Jan. 26th, the patient expressed himself as feeling well and strong, and persisted against advice in taking his discharge and returning to his occupation as a labourer.

Remarks by Mr. VOISEY.—The peculiarity of this case consists in the multiplicity of its complications. In addition to the cutaneous eruptions, miliaria, and sudamina, usually seen in many cases of acute rheumatism, and other acute febrile diseases, this case was still further complicated by two other eruptions, erythema tuberculatum and erysipelas. Most text-book agree that one or other of the various forms of erythema may occur in the course of acute rheumatism, but there is a difference of opinion as to the occurrence of erysipelas in such cases. The case is further peculiar as showing, what has been observed before, that acute tonsillitis may be of rheumatic origin, and it is on these grounds possibly that salicylate of soda and bicarbonate of potash have been recommended, the former internally, the latter locally, as efficacious in cases of uncomplicated quinsy.

GAOL HOSPITAL, KAIRA.

DEATH FROM AIR IN THE VEINS AFTER PARTURITION.

(Under the care of Surgeon D. CHAS. DAVIDSON, Indian Medical Service.)

IN March last a Hindoo woman was admitted into the Kaira Gaol Hospital, and safely delivered of a female child. The labour was perfectly natural. The head presented, the placenta came away at the usual time, and there was no post-partum hæmorrhage. About three-quarters of an hour afterwards the woman died, without any ostensible cause. There had been no hæmorrhage or convulsions. The patient had been taking some nourishment when she suddenly fell back and expired.

At the post-mortem examination, two hours after death, the uterus was found empty, with large and somewhat distended veins; the right side of the heart contained a quantity of air mixed and churned up with blood, and which escaped in bubbles; the lungs were congested; all the other organs were normal.

This is another case which might be added to the list of those already recorded of sudden death following parturition, presumably due to the entrance of air into the veins; and having occurred in a native of this country, in whom the dangers of childbrth are generally supposed to be comparatively trivial, it may perhaps not prove uninteresting to some of your readers.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Lingual Dermoid Cyst.—Stretching the Facial Nerve.—Spondylitis Deformans.—Epithelioma.—Nodes in Congenital Syphilis.—Infantile Hemiplegia.

AN extra meeting of the Clinical Society of London was held on Friday, June 1st, Dr. Andrew Clark, President, in the chair. There was only a small attendance of members, but a large number of communications were read. At the close of the meeting the Society adjourned until October next.

The committee on Dr. Tyson's case of Leprosy reported that sections of a piece of skin removed from the lad showed the presence of the peculiar bacilli noticed by Dr. Thin and others in tuberculated leprosy.

Mr. BARKER related a case of Large Sebaceous or Dermoid

Cyst in the Tongue, removed by operation, with cure. The case was one of a woman, aged twenty-eight, who had first noticed pain and difficulty in swallowing seven years before. Soon after a swelling was observed exactly under the tongue in the middle line, and directly behind the symphysis menti. This had been increasing ever since. On admission into University College Hospital it pushed the mucous membrane forwards and upwards, so as to make an interval between the jaw and the root of the tongue of quite an inch broad. It also projected beneath the chin for about an inch and a quarter. The skin over it here was perfectly normal, and in no way attached to the tumour. The whole tongue was thrust much upwards, and its dorsum rested against the hard palate. The tumour was painless, and fluctuated over its whole surface; there was no trace of inflammation anywhere about it. On puncture with a grooved needle, typical sebaceous matter was obtained. On Aug. 12th, 1882, Mr. Barker removed the tumour by a straight incision in the middle line under the chin. The tough cyst was reached above the mylo-hyoid muscle, and lay here partially separating the genio-hyoidei. It was easily separated from its bed, which lay almost entirely between the genio-hyo-glossi muscles, and reached quite up to the dorsum of the tongue, only covered by the tough mucous membrane of the latter. Blunt instruments and scissors were used, and hardly a trace of blood was lost, no vessels requiring to be secured, except one tiny twig, which was pinched. The wound having been well cleansed with carbolic solution, the skin was brought together with four silver sutures, and the large cavity drained with a tube. The wound healed in a few days without any suppuration or reaction, and the patient left the hospital on the sixth day after operation. The cyst (shown), being removed entire, was found very tough and firm-walled. It measured 3 in. by 1½ in., and was somewhat uniform. Its contents were like porridge, with a faint, sour smell, and under the microscope were seen to be typical sebaceous material. Its wall was fibrous, lined by a thin, glistening membrane, leaving no doubt as to its nature. Mr. Barker stated that after careful search he had been able to collect only sixteen recorded cases of lingual tumours of the kind, exclusive of his own two. From an examination of these, it appears that these cysts may occupy three distinct situations in relation to the tongue:—(1) Between the genio-hyo-glossi muscles in the middle line; (2) they may be unilateral—that is, lie between the mylo-hyoid muscle and genio-hyo-glossus of one side; and (3) they may be bilateral, lying above the mylo-hyoid and below the genio-hyo-glossi of both sides. Their contents vary also very much, as also the age of the patients among whom they are met, although they appear to be, in a sense, congenital. Mr. Barker preferred complete enucleation, without opening the sac, as the easiest and safest operation. This may either be done from the mouth or by a median incision, as in the last of the author's two cases. The scar left by the last method is very trifling, as seen in the patient exhibited, and the ease and safety of the operation are greatly increased where larger cysts have to be removed.

Mr. R. J. GODLEE read a paper on Cases of Stretching the Facial Nerve for Tic Convulsif. The first case was the conclusion of one reported in vol. xiv. of the Transactions of the Clinical Society, page 44, by Dr. W. Allen Sturge and Mr. Godlee, that of a lady, aged seventy-two, in whom the operation had been performed for right-sided tic. The result was almost complete relief for nine months, when the spasm recommenced as the result of a sudden and severe nervous shock, and gradually regained all its former intensity. The patient remains in tolerably good health, but still suffers from some neuralgic pain in the face, principally in the right supra-orbital nerve, and at the top of the head, on the left side, at the seat of an old injury. She is unwilling to undergo any further operation. The next case was that of a man, aged thirty-six, who had suffered from bilateral tic for some years without assignable cause. There was no syphilis and no source of reflex irritation, except some old carious stumps of teeth. It was made worse by exposure to cold and bright light and excitement. He had slight supra-orbital neuralgia on the left side. He was kept under observation for some months, and improved while perfect rest was maintained, but relapsed when allowed to go about. The left supra-orbital nerve was first divided subcutaneously without good effect, and subsequently the left, and afterwards the right, facials were stretched by the same method as in the former case. In both instances the twitching recommenced after three months, as the paralysis disappeared and returned as severely as before the operations. Arguments were adduced in favour of the mischief in these cases being situated in the region of the medulla oblongata, and references were made to as many reported cases as the author could discover. It was shown that, though all of these had been reported at first as examples of success, in all (except in one reported by Mr. Southam of Manchester, which remained quite well after two years) more or less return of the twitching had occurred. Some, however, according to reports carried up to the present time, remain to some extent improved. The total number of cases in the table amounted to thirteen. It was then urged, that if Mr. Southam's case did not exist, we should have to consider this chapter of surgical therapeutics closed, but that while it remained well there was still a certain amount of hope that the operation might be sometimes successful. It was lastly pointed out that the stretching of a small nerve on a hook acts differently from the stretching of a large nerve with the finger. In the latter class of cases the effect was probably either a loosening of the nerve from its sheath, or some influence on the nervous centre; in the former it caused a solution of continuity of the nerve, but with a certainty of union. The *modus operandi* was, therefore, probably not a profound effect upon the centre, as had been supposed, but merely the breaking of a bad habit, which must be taken for what it is worth.—Mr. H. PAGE thought the operation had been done oftener than might be inferred from Mr. Godlee's table. His colleague, Mr. Pye, stretched the left facial nerve and obtained relief for his patient for four months, but lately the spasms had returned after a severe fright. He himself had stretched the facial nerve for an obstinate case of incomplete facial paralysis, with had been attended with some very slight improvement. Dr. Braun had recently made observations on the effect of stretching the sciatic nerve, and he had found movements produced in very distant parts of the spinal cord.—The PRESIDENT agreed with Mr. Page that the table was really incomplete. Mr. Hutchinson had stretched the facial nerve in a patient of his two years ago with complete relief. He thought that Mr. Godlee's paper was one of considerable value.

Mr. H. H. CLUTTON read notes of a case of Spondylitis Deformans. The patient, who had been exhibited at a previous meeting, was thirty years of age, and the subject of a very severe form of anchylosis of the spinal column. In the family history there was nothing to indicate hereditary taint. In his previous history there was strong evidence of rheumatism affecting the joints. When nine years old he was confined to bed for rheumatism, which, with several intermissions, lasted for six months. It began in the metatarso-phalangeal joint of the right big toe. It then attacked the right knee, and finally the right hip. The latter joint had, he said, remained stiff ever since. Six years ago he had a painful foot, which the doctor called rheumatic gout. He had never had any venereal disease of any kind, and, beyond the attacks above described, had always had good health. Three years ago he first felt pain and stiffness in his neck, but they had caused him little inconvenience till the last six months. He can give no account of his back or chest, and is not aware that they are fixed and immovable. For the last three months his left shoulder has been stiff and painful, and he still occasionally suffers from rheumatic pains in the right hip. His present condition is one of almost complete anchylosis of the spinal column. He stands with the left leg advanced in front of the right, with the knees bent, and in a stooping posture. His spine presents one large dorsal curve, with the convexity backwards. The head is craned forwards, and the chest sunken and depressed. The movements of the head are very much impaired, although not as yet completely destroyed. He cannot turn his head at all to the right, and only slightly to the left, the nose moving about an inch and a half from the median line. The lateral movements ordinarily obtainable in the cervical region are entirely absent. In raising and depressing the head, the chin only moves three inches. There is no movement whatever in the lower cervical vertebræ. This is very apparent on trying to make the patient bring his chin towards the sternum. On bending the whole body forwards, it is seen that the spinal column is quite rigid; there is no separation between the spinous process, or increase of curve. With the knees extended the tips of the index fingers just touch the patella, and this movement appears to be effected by the hip-joints. The respiratory movements are entirely abdominal. On the deepest inspiration there may be some slight expansion, but there is no elevation of the ribs. His height is now 5ft. 2in., and

he is quite sure that some years ago he was 5ft. 5½in. As to other osteo-arthritic changes, the patient has several creaking-joints and distinct "lip-growths" in both shoulders and big-toe joints. He has also distinct limitation of movement in the left shoulder. The right great trochanter is larger than the left, and tender on pressure. All the other joints except those named seemed perfectly healthy. Such an extensive and severe form of anchylosis of the spine, with or without osteo-arthritic changes elsewhere in the body, was a rare condition in a man thirty years of age, and it was on this account Mr. Clutton brought him before the Society. A similar case was shown at this Society by Dr. Allen Sturge, and is recorded in the Clin. Soc. Trans., vol. xii.

Dr. LEDIARD also contributed notes of a case of Spondylitis Deformans and Osteitis Deformans. The patient was a miner, aged fifty-eight, from Cumberland, who had suffered from repeated attacks of pain in the spine, and rheumatic affection of the joints, and of late years stiffness of the spine and head, so that the body was bent forwards in a stooping posture. The spine was absolutely anchylosed except for slight movement in the neck, and the head was firmly fixed to the spine. Several joints presented chronic rheumatoid arthritic changes; there was no movement of the chest walls, respiration being entirely diaphragmatic. The femora were curved forwards and outwards, and the shafts, somewhat massive, suggesting the disease known as osteitis deformans in possibly an early stage. The skull and clavicle were, however, unaltered.—Dr. DYCE DUCKWORTH said that if the changes in spondylitis deformans were the same as those in osteo-arthritis, it was remarkable that the spine was so rarely affected. He believed Mr. Hutchinson had said that gonorrhœal rheumatism was often the starting-point of spondylitis. The most interesting cases were those occurring in young people.—Mr. CLUTTON stated that his patient denied ever having had gonorrhœa.

Mr. GEORGE LAWSON related the history of two cases of Epithelioma which had occurred on old Cicatrices, and which he had removed. In the first case, the patient, a pale, anæmic woman, aged thirty-eight, had lost, in childhood, the sight of both eyes, except the bare perception of light, from an ulcerative inflammation, probably diphtheritic, and which had caused complete adhesion of the upper and lower eyelids of each eye to the globe. The patient was admitted into the Middlesex Hospital in May, 1881, and the growth first commenced in the previous September. It sprang from the cicatricial tissue which united the left lower eyelid to the globe, and steadily increased until it obtained the dimensions shown in a drawing, the whole front of the eye being occupied by it. Mr. Lawson removed the growth and the eye. Two years have now elapsed since the operation was performed, and there has been no recurrence. In the second case, the patient, a strongly built man, aged thirty, was admitted into the Middlesex Hospital in March, 1881, with an epithelioma of the left thigh, which occupied the greater part of a large cicatrix. Twenty years previously his left thigh was crushed by a heavy cart passing over it, which caused great laceration of the skin and muscles. He was seven months in the Aylesbury Hospital, and when he was discharged there was still an unhealed superficial wound of about the size of a small saucer. He then went to work as a farm labourer, but the wound never healed. Two years and a half before his admission into the Middlesex the wound took on a new action. It began to spread rapidly, the granulations became large and fungoid, and it occasionally bled. On admission, there was found an epitheliomatous ulcer measuring seven inches and a half by eight inches. Mr. Lawson amputated the thigh just below the trochanters, and although two years have elapsed there has been no recurrence of the disease. Mr. Lawson remarked that the cicatrices which seemed specially prone to epithelioma were the tight cicatrices, such as are caused by a great destruction of skin, and those cicatrices upon which there is a constant tension. Both the cases, he said, tended to show that if epithelioma can be completely excised before it has affected lymphatic glands, it is the form of cancer which is the most amenable to treatment; whilst experience has taught us that after the lymphatic glands are invaded, epithelioma is the most formidable and irremediable of all the cancers.—Mr. GODLEE asked if the epithelioma sprang from the middle or the edge of the scar. He referred to a case in which cancer started in the centre of a lupus scar.—Mr. LAWSON said that the unhealed part of the wound became a fungating epithelioma.—Mr. HAWARD said these cases pointed to the local origin of cancer. He referred to a case of an unhealed burn on a leg which had remained in much the same state for twelve years. Then it began to be painful and fungate, all attempts at healing failed, and eventually the leg was amputated and the growth was found to be epitheliomatous. There was no history of cancer in the family. There had been no recurrence of the disease after seven to eight years. There were other such cases of long unhealed sores becoming cancerous which had been completely cured by excision.—Mr. A. BARKER said the case was interesting as showing the influence of local irritation in causing epithelioma; this was specially found in cases of cancer of the tongue.—Mr. PEARCE GOULD referred to a case of a woman in whom epithelioma developed at the edge of a scar on the thigh caused by a burn thirty years previously, and to the case of a man who had received a charge of shot in the leg several years before in whom epithelioma developed in and around unhealed sinuses. Such cases showed the close resemblance of the less malignant forms of epithelioma to rodent ulcer which Mr. Moore had shown to start very frequently in old scars.—The PRESIDENT asked if Mr. Lawson had found syphilitic plaques in the tongue precede epithelioma, and how irritation led to cancer.—Mr. LAWSON replied that syphilitic tongues were more subject to cancer than others. These cases of epithelioma were very manageable in their early stage, but utterly beyond control in their later stage. There were many instances of local irritation producing cancer, but he was unable to explain how it did this.

Dr. RADCLIFFE CROCKER described the case of a girl, aged twelve, with Nodes from Congenital Syphilis. The patient had been shown at a previous meeting. She had enteric fever five months before she came under notice, and during convalescence two nodes appeared on the forehead, one on each side of the median line; there was another tumour in the right orbit, softer than the nodes and movable. There was no corroborative evidence of syphilis about the girl except the two upper central incisors, both of which were notched, and one was slightly pegged. No history of infantile syphilis could be obtained, and the mother and the other children were apparently quite healthy; but eventually it was ascertained that the patient was a child by a previous husband, who died soon after marriage, had lived a dissipated life, and was never well, but resented inquiries into the cause of his ill-health. The patient was put under iodide of potassium, and when last seen the softer tumour had quite gone, and both the nodes were softer and much smaller, and the improvement in the general health of the patient was very striking. Dr. Crocker remarked that the case corroborated Sir James Paget's observation that typhoid fever often aided in the discovery of constitutional taint, and also Mr. Hutchinson's observations on the value of the notched and pegged incisor teeth as evidence of congenital syphilis.

Dr. FREDERICK TAYLOR read a paper on the case of Infantile Hemiplegia with unusual Reflex Phenomena, shown at the last meeting of the Society. The patient was a child, aged five, who was seized with convulsions at twelve months old. This condition lasted two hours, and was followed by weakness of all the extremities. In a few days the right arm began to move, and the right leg, but the left limbs remained paralysed. Gradually rigidity developed, and with it the curious reflex irritability to be described. The child was fat and well, commonly semi-recumbent with both legs semiflexed and rigid, the left armed flexed at all joints and rigid. This arm is scarcely used, but the right freely and well. Both legs can be moved, but not completely flexed or extended. The right is less rigid than the left. The child cannot sit up in bed, nor stand upright, nor walk. The left arm and leg are nearly two inches shorter than the right arm and leg respectively. On making a sudden noise near the patient the left arm is quickly thrown out at right angles to the body, the elbow, wrist, and fingers are extended, the face assumes a puzzled expression, and the legs undergo moderate extension. The condition of spasm remains for about thirty seconds, then slowly relaxes. The same reflex contractions are brought about by shocks affecting the surface of the body, as a blow on the crib or a tap on the head. Vision appears to be good, but there is disseminated choroiditis in very small patches in both eyes. He is lively, fairly intelligent, and can talk. He passes fæces and urine involuntarily. But for the choroiditis there is no conclusive evidence of congenital syphilis. He has been four months treated

with iodide of potassium and mercury, but shows no material improvement. Dr. Taylor thought the case was allied to those of infantile hemiplegia with spastic or choreic phenomena occurring afterwards. Though not strictly unilateral, the disease on the left side was obviously of cerebral origin, and that on the right side must be explained by a second lesion, or more likely by a single lesion crossing the middle line. The mode of origin suggested obstruction of a vessel with syphilis as a possible antecedent. Its early occurrence and the deficient growth of the left limbs rendered it probable that asymmetry of the brain also co-existed.

Reviews and Notices of Books.

The Medical Language of St. Luke, &c. By the Rev. WILLIAM KIRK HOBART, LL.D., Ex-Scholar, Trinity College, Dublin. Dublin: Hodges, Figgis, and Co.; London: Longmans, Green, and Co. 1882.

The full title of this interesting work, which is published under the auspices of the Provost and Senior Fellows of Trinity College, and included in the Dublin University Press Series, is "The Medical Language of St. Luke; a proof from internal evidence that 'the Gospel according to St. Luke' and 'the Acts of the Apostles' were written by the same person, and that the writer was a medical man." Though Dr. Hobart states, in a foot-note, that the assumption that Luke was the writer is merely a matter of convenience, and that he intends to leave the fact of the identity of authorship "to be inferred from the evidence adduced in the work in connexion with the writer's phraseology and style," it does not require much perspicacity to discover that he believes Luke to have been the actual as well as the reputed writer. This is rendered perfectly obvious by the remarks contained in the concluding note on the "Probability of St. Paul's employment of St. Luke's professional services." It would therefore appear that Dr. Hobart throws down the gauntlet to two sets of critics at once—namely, first, those who do not think the language and phraseology of the third Gospel and the Acts warrant the inference that the writer was a medical man, and, second, those who from external and internal evidence do not believe that Luke wrote either or both of the works commonly ascribed to him. With the latter we have nothing to do, but we may at the outset confess we have always thought too much stress has been laid on the so-called "medical language of St. Luke." This opinion is in no degree shaken by the "cloud of witnesses" that Dr. Hobart has adduced on the other side. Many terms and phrases doubtless do occur in the reputed writings of Luke, which may also be found in Greek medical authors, but it does not follow that these terms are peculiarly medical because, with one or two exceptions, they are not technical. In the majority of the instances the use of certain words in common implies community of language rather than identity of vocation. This has been pointed out by many commentators. The writer of Luke's Gospel was a Greek and wrote for the Gentiles. His language is therefore purer and freer from Hebraisms than that of any other of the Evangelists. Many facts might be cited in proof of this, but four will suffice. Matthew (xxii., 17) and Mark (xii., 14), in speaking of "tribute," make use of the word κῆνσος, which is never used by Luke, who employs instead the more correct term φόρος (xx., 22). Again, whenever Matthew (iv., 18) and Mark (i., 16) have occasion to mention the Lake Tiberias, they always speak of it as a "sea," θάλασσα, whereas Luke, better informed, and writing for a nation familiar with maritime affairs, employs the term "lake," λίμνη. But the most striking example is perhaps to be found in the accounts given by Matthew, Mark, and Luke respectively, of Jesus's injunctions to his apostles, to take no money with them in their journeys. In Matthew (x., 9) and in Mark (vi., 8), with minor differences, the literal expression is, Take no *bronze* in your *girdles* (μηδὲ χαλκὸν εἰς τὰς ζώνας ὑμῶν). Luke (ix., 3), on the other hand, employs the phraseology of a Greek, and speaks of *silver* (ἀργύριον) carried in a *purse* (βαλάντιον), x., 4. This difference in the use of the word χαλκός by Matthew and Mark as a generic term for *money*, and the word ἀργύριον by Luke in the same connexion, is indicative of the nationality of the respective writers and of the people for whom they wrote. Bronze (χαλκός, *æs*), a mixture of copper and tin, was the current coinage in the Roman world, while silver (ἀργύριον) was almost the universal currency of Greece. With the Romans *money* was "æs," with Greeks it was ἄργυρος, all words connected with money being derived from this term. In this simple way most of the terms found in Luke and the Greek medical authors are probably to be accounted for, without calling in the aid of a forced and factitious explanation.

Several writers before Dr. Hobart have treated of the supposed medical terms to be found in Luke's writings, notably Professor Plumptre, in the *Expositor*, and in his Commentaries of Luke's Gospel and the Acts of the Apostles. On the other hand, Dr. Samuel Davidson, one of the most learned and sagacious of the modern critics of the New Testament writings, makes light of the opinion that the writer of the third Gospel and the Acts was a medical man. He allows that the expression "a great fever" (Luke iv., 38), and a technial term, ἀχλὺς (Acts xiii., 11), denoting blindness, are Galenic; but he argues that they are doubtful technical terms, and maintains that the other purely medical terms which have been discovered are imaginary. Between Dr. Davidson with his two *doubtful* medical terms, and Dr. Hobart with more than four hundred words all assumed to be more or less medical, is a gulf which requires considerable ingenuity to pass. Though Dr. Hobart seems to us not to have successfully accomplished this feat, we are far from regarding his attempt as a failure. If his arguments be not conclusive, his industry, impartiality, and acumen cannot be gainsaid. The results of his labours have, in spite of possible defects, great critical and historical value, and will furnish the material for subsequent investigators to work upon. Many hundreds of quotations have been collected from the writings of Hippocrates, Aretæus, Dioscorides, and Galen to illustrate the signification of the various expressions taken from Luke's writings. The complete and efficient manner in which this task has been performed exhibits not merely diligence and zeal, but considerable erudition and a well-trained critical faculty.

Dr. Hobart's argument is made up of three parts, and may be summarised as follows:—First, the writer of the third Gospel and the Acts of the Apostles employs medical language in his accounts of the miracles of healing &c.; second, that in the general narrative, as compared with other New Testament writers, he strongly inclines to the use of medical language; and, third, that even where a comparison cannot be instituted, words occur which were in use in medical phraseology, and which, from habit and training, a physician would be likely to employ. The body of the work, consisting of nearly three hundred pages, is devoted to an elaborate expansion of the argument. We cannot undertake to give even a brief description of the details of Dr. Hobart's scheme. We must rely on a general statement that the author proves too much. Testimony of the slightest kind is readily accepted, and often raised to first-class importance. Nevertheless, Dr. Hobart will have the majority of persons on his side. Apart from niceties and technicalities of language, the belief that Luke did write the third Gospel and the Acts has prevailed so long, and has acquired such a strong hold upon the general mind, that it is not likely to be displaced by any

amount of adverse criticism from scholars. Those who understand the working of the human heart better than the intricacies of the Greek language discover irrefragable evidence of Luke's professional instincts and bias in the account he gives of the healing of the woman who had "an issue of blood twelve years." The writer of the second Gospel, with (perhaps unnecessary) profusion of detail, relates that the woman "had suffered many things of many physicians and had spent all that she had, and was nothing better, *but rather grew worse*" (v., 26). Luke's statement, on the other hand, is given in more general terms, and omits the circumstance that the poor woman was worse rather than better for the money she had spent on the doctors. The omission is certainly remarkable, and not without some significance.

Les Hystériques: Etat Physique et Etat Mental; Actes Insolites, Delictueux, et Criminels. Par le Dr. LEGRAND DU SAULLE. J. B. Baillière et Fils. 1883.

PROBABLY all physicians would agree with the opinion that hysteria as we know it and hysteria as witnessed by the French is very different, not perhaps so much in nature as in degree. To the English student of medicine it would almost certainly be a great waste of time to read a French work on hysteria, we mean only so far as concerns the actual practice of physic in England. The present work is one of considerable size; the matter is of a readable kind, well digested, and evidently comes from the mind of a physician well versed in the study of mental and nervous disease. Nothing else could be expected from an observer of Legrand du Saulle's experience and standing. The first chapter considers sufficiently all the alleged factors in the etiology of the disease. The opinion is stated that the neuropathic disposition is the most efficient element in the causation. The author does not seem inclined to regard flexions and versions of the uterus as having much to do with the origin of hysteria. We fully endorse this opinion. The various corporal manifestations of the complaint are amply dealt with in the second chapter. Hypnotism, as observed in hysterical patients, is considered in the next section, and Charcot's contributions to the theory of the subject, the dominant idea of which is the hyperexcitability of the neuro-muscular apparatus, receive a prominent place. Disorders of the mental faculties met with in hysteria receive lucid descriptions, and the part is illustrated by accounts of interesting cases; the multiform character of the disease is nowhere better shown than in this relation. At the close of the chapter an endeavour is made to harmonise all the facts with physiological teachings. We fully sympathise with the trial; the result could only be tentative in the present state of knowledge. Hysterical Mania is the title of the next part. Here many clinical observations of cases of delirium, with hallucinations, of suicidal impulses, and transient erotic manifestations are recorded; the rarity of actual dementia is insisted upon; and the delirium of drunkards and hysterical delirium are compared with one another. The epidemic features of hysterical mania are also pointed out. The medico-legal aspect of hysteria is a subject with which Du Saulle is perfectly "at home." This section, which constitutes a third of the contents of the volume, is profusely illustrated with records of cases which for depth of interest and wealth of incident fully vie with the most realistic novels of French literature. The last chapters are devoted to questions relating to the nature, prognosis, and diagnosis of the disease; its treatment receives short but sufficient attention. In an appendix the author treats of nymphomania, which he regards as a different affection from hysteria, although the two may be combined in the same individual. Erotomania is separated from nymphomania; the former is a disease of the imagination not characterised by the excessive use of the physical organs.

Revue Mensuelle des Maladies de l'Enfance. Avril, 1883. Paris: Lauwereyns.

THE April number of this journal, which appears to have the collaboration of many eminent French physicians, contains original articles on the Treatment of Congenital Phimosis by Preputial Dilatation, on the Headaches of Young People, and on the Treatment of Infantile Maladies by the Waters of Bourbonne-les-Bains. Of these, the last, by Dr. Mercier, is perhaps the most important and deserves further consideration. We are disappointed not to find detailed statements as to the modes of application of the Bourbonne treatment and of the special indications for particular methods. There is also given a classified synopsis of recent contributions on children's diseases, by French, German, English, and American writers, and concerning] this admirable section of the journal, we can only offer the criticism that some of the summaries are rather meagre. From the reports of societies, it is clear that M. Parrot's view as to rickets being solely a transformation of congenital syphilis, scarcely commands any more acceptance in Paris than in London.

New Inventions.

ABSORBENT COTTON-WOOL TISSUE.

MESSRS. ROBINSON & SON, of Wheat Bridge Mills, Chesterfield, have, at the suggestion of Mr. Sampson Gamgee, made a material for surgical dressings, to which the name of absorbent cotton-wool tissue has been given. It consists of very fine and pure absorbent cotton between two layers of fine absorbent gauze. It is sold in rolls of various widths, ike lint, or cut into sheets of different sizes. This tissue is very light, perfectly smooth, powerfully absorbent, and of great elasticity. It can be applied to any surface with the greatest ease, and has very many uses in surgery. Thus, as a means of applying elastic compression, there is nothing more convenient than a bandage evenly applied to a limb or the trunk over a layer of this tissue; it makes an excellent absorbent dressing for wounds, and is a padding for splints which can at once be applied quite evenly. Mr. Gamgee has also shown that it can be utilised for the application of plaster-of-Paris splints. For example, to apply such a splint to the leg, all that is needed is to wrap the limb in a layer of the dry tissue, then take a similar piece of the tissue and soak it in plaster-of-Paris "cream," and fasten it to the limb by a light bandage; extra strength can be obtained either by another layer of the soaked tissue, or, much better, by laying thin narrow strips of deal veneer between the layers of the tissue. In this way a plaster splint is very readily applied, made to fit accurately to the part, and yet be of the minimum weight. The tissue is sold also by Messrs. Southall and Barclay, impregnated with any of the various antiseptic agents. We anticipate that this tissue will become a very favourite dressing material when its many great advantages come to be generally known.

AN INHALING TUBE.

THIS is a simple invention by Mr. Godfrey Harman, consisting of a wide-mouthed metal cone and tube passing from it at a right angle, intended to be adapted to any vessel that may be used for the purpose of inhalation of vapour. The cone is of sufficient size to cover the mouth and nostrils, and at the angle of junction with the tube a sponge can be placed to receive the medicament employed. The main merit of the apparatus is its adaptability to vessels of any shape or size. It is to be obtained of Messrs. Young and Postans, 35, Baker-street.

THE LANCET.

LONDON: SATURDAY, JUNE 9, 1883.

THE recurrence of the Metropolitan Hospital Sunday in the midst of a beautiful and promising summer is an event of considerable importance in the present financial state of our London hospitals. The event calls for a reconsideration of the claims of hospitals and of Hospital Sunday on all religious men. It is very easy to be critical, and to find excuses for not supporting these institutions, for "passing by on the other side" of the wounded and sick men, women, and children, who crowd them; but it is far more worthy of religious men to enact the part of the good Samaritan, and to "pour in oil and wine." We are glad to recall the fact that a marked increase in the sum raised has characterised the collections in the last two years, and we venture to believe that the present year's collection will again exceed that of other years. The need of the hospitals never was greater. Last year we gave many illustrations of this; but these have been since repeated *ad nauseam*. Even the endowed hospitals have been overtaken with impecuniosity. Both Guy's and St. Thomas's have to curtail their accommodation for the sick. This of course throws more work on the unendowed institutions, which continue to struggle for the accommodation of five and six thousand in-patients. For at least one day in the year the anxious committees of these hospitals have their heavy sense of responsibility somewhat lightened. On Hospital Sunday they seem to divide that feeling with all the Jews and all the Christians of this wealthy metropolis. If miserable suppliants are looking for admittance, for whom there are no available beds, if those actually under treatment in hospitals and dispensaries are hindered in their recovery, or have to be prematurely discharged, from want of funds, the committees may feel on Hospital Sunday that they are not solely to blame, that it is not merely want of financing ability or effective begging power on their part. If with all the ministers of religion engaged in demonstrating the duty of mitigating the miseries of sickness associated with poverty, the collection falls short of the necessities of the case, the committees of hospitals may almost be excused if they pray to be relieved of their duties, and propose that the hitherto proud distinction of British hospitals, "supported by voluntary subscriptions," be henceforth discontinued. This is the clear risk of the existing state of things, which we look to the churches and synagogues of London to remove.

Of late years we have been so pressed with proposals for the organisation of charity, that we have been in danger of losing sight of its chief end—that the really poor and pitiable may be well helped, while those who are neither the one nor the other may be taught independence. But charity should be the first thing, and the organisation of it the second. It is surely better that a few unfit persons should be relieved, than that the six or seven thousand of sick poor who need our help should be stinted. By all means let charity be organised, but let us have charity first and organisation second.

A singular new illustration has been given of late of the uses of hospitals for the poor. Even the comparatively well-to-do have discovered the occasional need for a hospital. If those who have a selection of rooms and the means of securing the best advice occasionally repair to pay hospitals, what must be the necessity for hospitals to those with one or two rooms, and with scanty means of living? Where, if our great hospitals are to be gradually closed, shall they find a "bed in their sickness," and nursing, and the skilful hand that will restore life, and limb, and sight?

The ministers of London, who last year "cast into the treasury" some thirty-four thousand pounds, do not need any help of ours to double this sum. We look to them confidently for a rebuke of that kind of charity which is so critical that it discourages charity. The Hospital Sunday Council has two great claims on their support. First, that it is a Council nominated chiefly by themselves; and, secondly, that its objects are thoroughly sound—viz., first, to secure better incomes for all kinds of hospitals for the poor, including convalescent ones, and next to secure in these institutions the best administration of funds contributed by the charitable. If we might make a suggestion to those gentlemen who plead so earnestly every year, it would be to urge on the really wealthy the great claims of these institutions. It is a peculiar feature of wealth in these days, that it tends to accumulate in certain hands. Out of these accumulations a few modest useful hospitals might be built and endowed without material inconvenience, and with enormous moral and material results. Of all monuments to wealth, none are more worthy or lasting than hospitals. Where a hospital cannot be erected, a bed or a ward might be established, on which for years some weary sufferer might find rest and restoration.

IT would be interesting, and help to place the question of medical charity—*truly* so-called—in a new and instructive light, if some statistician would prepare a just and clear estimate of the money value of medical services rendered gratuitously in connexion with hospitals. Because there is a general idea in the public mind that the medical men attached to hospitals by honorary appointments must in some way find compensation for the loss of time and the tax on their strength which the discharge of their duties entails, the money value of the work done by them is wholly disregarded. Every man who subscribes a guinea a year to a hospital is deemed to be doing a benevolent act, while the physician or surgeon who gives in time and toil the equivalent of scores of guineas during each annual period is not credited with any contribution to the resources of the charity. It is time this matter of "money value" in relation to medical services should be put on a new footing. We should like, not merely on sentimental but on sound economic grounds, to see the medical profession fairly credited with its annual contributions to the relief of the sick poor. Whether the honorary staffs of hospitals do or do not find a *quid pro quo* in the opportunity afforded them for practice and the prestige a hospital appointment confers or is supposed to confer on its holder, the fact remains: the work

done *has* a distinct money value, and, discount the gift how we may, there is undoubtedly a large tithe devoted by the profession to charitable purposes of which it has no acknowledgment. If this phase of the hospital question were carefully studied, we venture to think some new and astonishing facts would come to the surface of the inquiry with the startling figures which an able and clear-headed statistician could not fail to evolve. It is not our present purpose to discuss the proposition we have stated; but it may suggest consideration of a topic having very practical bearings if we simply jot down a few of the points which occur to us as especially deserving of scrutiny.

Obviously, the advantages which are supposed to accrue to the office of physician or surgeon at a hospital can seldom, if ever, be direct or immediate. The precise measure of the gain is the extent of the actual need which exists for the work done. Looked at from the strictly professional standpoint, and none other can be tenable in these columns, the only services recognisable are those required for educational purposes. Appointments having for their object the teaching and training of students are essential, and the professional men holding them are entitled to be regarded as doing not merely legitimate, but necessary, work. Hospitals, dispensaries, and medical institutions generally which are not utilised as schools stand on a totally different footing. The service rendered to the poor may be good, and those who administer the charity may be entitled to public esteem; but they cannot be looked upon as servants of the profession; and, blink the fact as we may, it is simply and plainly true that the prestige accruing to appointments in connexion with these charities must be in the main sentimental and popular, or in other words equivocal. The status of a physician or surgeon attached to one of the teaching hospitals is not only far higher than, but wholly different from, that of the professional man, albeit possibly as worthy in himself, who holds office at an institution which is solely charitable in its purposes.

To speak frankly—and we must do so if this delicate subject is to be placed in its true light—the motives and interests of the medical man who seeks and holds an appointment in connexion with a non-teaching hospital must be either wholly selfish, or in part selfish and in part charitable, or purely benevolent. When we say "selfish" we do not use that term in an opprobrious sense, but as expressing the natural desire to secure opportunities for practice and such status and *kudos* as may be gained from being brought before the public as the elected physician or surgeon of a reputable hospital. In most cases there is probably an admixture of selfish and charitable sentiment in the mind of the holder of an appointment of the nature to which we are now alluding; that is, in connexion with a non-teaching hospital. Nor can it be doubted that in many instances physicians and surgeons are animated solely by benevolent impulses in retaining, if not also in accepting, honorary appointments which cannot possibly add to the esteem in which they are held by the community. Nevertheless in no case, except that of the academical physician or surgeon who is attached to a teaching hospital, is the position of matters thoroughly clear in the face of the facts.

We have consistently offered strenuous opposition to the multiplication of special hospitals, as occupying an equivocal position, and lying always open—though, perhaps, not always justly—to the imputation of being either instituted or supported for the advantage of the medical men attached to them. What we mean and feel on this point is simply that special hospitals, and even general hospitals which are not academical, give to their honorary staffs a reflected glory which is unreal, or, in other words, which has no *professional* value. In the consideration of this question it is necessary to draw a sharp and, if need be, an arbitrary line of distinction between the internal or professional and the external or general public view of the matter of prestige. We can recognise no prestige which is not professional. The prestige enjoyed by the holder of an appointment which is not in a professional sense recognisable is, of course, from our standpoint equivocal. When, therefore, we seem to ignore the services rendered by medical men at non-teaching hospitals it should be understood that we do not intend to cast a slur on them; but we must leave to the community the task of setting a value on the services so rendered. As a matter of fact, public opinion may place a higher value on the services of medical men attached to non-teaching hospitals than to those of an academical staff, for the very reason that we ignore them—namely, that they are not in a professional sense appreciated, and may therefore claim to be counted as self-sacrificing. The popular argument would be that inasmuch as the services rendered to non-teaching hospitals are not of professional value—that is, of value to the profession—they must be purely charitable. We gladly give the fullest effect to this inference, but the fact remains, that, seeing how the public estimates such services, it is obviously conceivable that services of the class are sometimes rendered with a view to the public acknowledgment they receive. In short, we are bound to say, and must repeat, that work done for what are manifestly solely charities is open to the charge of being an appeal *ad populum*.

Whether, however, professional or popular in its aim, medical work always has a money value, and in order that this should be estimated on fair grounds, and that medical men should be credited with what is due for it, this value should be estimated in guineas. There is nothing sordid in this view of the case. It is a purely economic argument, which all political and social economists must recognise and to which they ought to give effect. Medical men should insist on having their services so calculated and registered, and until this point is gained it is impossible that the time and trouble lavished by members of our profession, whether on the profession itself or on the public, should be adequately appreciated or, in any sense, requited to those who serve.

IN the discussions which have taken place, and in the comments which have been made upon the working of the Army Medical Service in Egypt, as shown in the report of the Committee, much weight has naturally been attached to the opinions expressed by Lord WOLSELEY, as the Commander-in-Chief of the Force. These, in some respects, have been of a character unfavourable to the arrangements which were made, and to the manner in which the details were carried out. It becomes therefore a matter of importance to inquire what are the points in which he thinks there has been a failure, on what grounds has he formed this opinion,

to what causes may the shortcomings be fairly attributed, and how far was the Medical Department responsible for them? In his evidence before the Committee, the first subject on which Lord WOLSELEY expressed disapprobation was the state of the hospital at Ismailia on August 26th, when he was "immensely disappointed with it," and thought it "very discreditable." He stated that there were no mosquito curtains, that there seemed to be a deficiency of hospital attendants, that the bulk of the men were lying on the ground on blankets, having no bedsteads, and that the bread was unfit for human food, and he appears to throw the responsibility of these defects upon the Medical Department. But to what was the deficiency of hospital equipment at Ismailia due? As it appears to us, there were two causes: First, the hospital was not originally intended to be a base or general, but a field hospital, and was to be equipped accordingly; and, secondly, the hospital ship *Carthage* was delayed at Alexandria, and did not arrive at Ismailia till the evening of August 25th, and consequently the medical stores and comforts were not landed till after the sick and wounded were pouring in from the front. But this delay was surely not the fault of the Medical Department; so far as we can see it was a result of Lord WOLSELEY'S own arrangements. In his evidence he says that the fact of the hospital at Ismailia being not a base, but a field hospital, "is the technical way of getting over a great number of difficulties, but it is a fiction more than a reality. It was really a base hospital; whatever it may have been actually called, according to the regulations it was actually a base hospital." But is not this "a technical way" of shifting the blame from his own shoulders? Is it not the case that in the arrangements made for the expedition, and on which it is understood he was consulted before leaving England, the base hospitals were to be at Alexandria, Cyprus, and Gozo, and provision was made for the equipment of any other hospitals merely as field hospitals? Could his opinion, therefore, that the one at Ismailia was really a base hospital alter the provision which had been made, with his concurrence, for its equipment as a field hospital? and if not, upon what principle can the Principal Medical Officer be blamed for the absence of bedsteads?

Again, as to the delay in the arrival of the *Carthage* with the field hospital equipment and medical comforts, Lord WOLSELEY says he cannot tell why it was; but as the movement of the troops from Alexandria to Ismailia was made by his orders it appears clear that the responsibility for the delay, from whatever cause, in bringing up the necessary hospital equipment must rest with him or his staff. If, then, the state of the hospital in this respect was so discreditable on the 26th, the blame cannot be shifted to the medical officers, who had no power or control in the matter. The deficiency of hospital attendants, of which he complained on that date, appears to have arisen from the necessity of employing a number of the men of the Army Hospital Corps on fatigue duty in bringing the stores and equipment from the ship to the hospital. This seems to have been unavoidable under the circumstances in which the Force was placed, and certainly ought not to be brought as a charge against the medical department. It was a duty which should have been performed by the Commissariat Transport Corps, and it was only from their inability to overtake it that it devolved upon the men who would otherwise have been employed in the hospital. The next complaint, that the bread was very bad, "unfit for human food," was undoubtedly correct, but we fail to see why it should be brought as a charge against the medical officers. It was the duty of the Commissariat to supply food for the hospital, and they were responsible for the quality of it. But how did they act? It appears from the evidence that when regimental commanding officers complained of and condemned the bread their complaints were remedied, but this was not done in the case of complaints by medical officers. But the General commanding does not seem to have sent for the Commissariat officer and found fault with him, or to have made any inquiry into the cause of the failure to supply good bread; he vented his indignation on the medical officer for not having gone into the bazaars and bought better bread. Lord WOLSELEY, however, surely must have known that there was a War Office order that "there should be but one purchasing department in the local market, and all articles required should be provided by means of requisitions upon the Commissariat department." If, then, he wished the medical officer to purchase food and other supplies, why did he not cancel this order and give a written authority to him to expend any sums he might think necessary? It is a very easy thing to say to a medical officer, "If you cannot get good bread go into the town and buy it," but Lord WOLSELEY must know by official experience that the War Office would probably never sanction such purchases unless supported by an order from the constituted authority. If, then, there was a necessity to make such a purchase, why did he not give an order in writing? or, still better, why did he not send for an officer of the department responsible for the supplies and order him to make the purchases, instead of verbally telling the medical officer to do it? He cannot plead ignorance of the necessity for such a course. If he held at Ismailia the opinion he expressed before the Committee, he seems to have laid himself open to the very charge he has brought against the medical officers that there was no initiative on his part. If the state of affairs was really so bad as he represents it to have been, how can he justify himself for having done nothing but (to use his own phrase) "pitched into" the medical officers?

When the troops reached Cairo, Lord WOLSELEY states that he found greater fault there than at Ismailia, but we cannot find that he made any greater exertion to have the defects remedied, except that, on the application of the Principal Medical Officer, he authorised him to hire a civilian cook for the hospital. He seems to have passed over the Commissariat entirely, and to have found fault with the medical officers for not undertaking the duties of another department. The difficulties experienced by the medical officers are well shown in Sir J. HANBURY'S evidence, and appear to have been to a great extent due to the army having outstripped its transport and to the insufficiency, probably unavoidable under the circumstances, of the arrangements of the departments of supply. But it appears to us remarkable that if Lord WOLSELEY felt so strongly that the arrangements were unsatisfactory, and that the blame rested with the medical officers, he should have telegraphed on Sept. 30th to the Director-General. "Dr. HANBURY has shown me your telegram as to alleged defects in medical arrangements.

I have told him he need not answer, as full explanations go home by post. We are all too busy here to reply to the false and malicious reports to which you refer. The medical department is working to my entire satisfaction." Which is more likely to be correct, his report on the spot, with everything under his eye, or his impressions two or three months afterwards? There is another of Lord WOLSELEY'S statements before the Committee to which we take great exception. He said, "If there had been a military officer in that place [Ismailia Hospital] looking after the sick and wounded I am quite convinced that he, having the sympathies of a soldier and knowing the soldiers, would never have allowed those soldiers to be given that bread." It has rarely been our lot to read a more ungenerous statement or a more unfounded calumny than that the medical officers are deficient in their sympathy for the sick as compared with other officers. Even Lord WOLSELEY'S own subsequent statements condemn him. "The wounded men," he says, "were not only moved quickly but, owing to the care taken of them by the medical officers, they were moved with very great comfort to the men themselves." "I think, taking them all-in-all, their devotion to the sick was very remarkable." Could this have been the case had there been a want of sympathy?

We observe with great regret throughout Lord WOLSELEY'S evidence a marked absence of any attempt at an impartial survey of the working of the Medical Service. This has been not inaptly characterised by himself: "I have described the Ismailia hospital in the gloomiest possible way to you. I have not told you anything that I found was well done in it. I have only picked out the weak points in it, and described what I thought was wrong; but even as regards what I thought was wrong I made considerable allowances, owing to the great difficulties that the medical officers were under." It is difficult to understand Lord WOLSELEY'S motives for adopting this course, and we should have been scarcely disposed to believe he had done so upon the authority of anyone but himself.

Lord WOLSELEY drew a comparison between the Army Hospital at Cairo and Lady STRANGFORD'S, much to the disadvantage of the former; but the circumstances under which the two hospitals were organised render the comparison worthless. The Army Hospital was obliged from the very commencement to admit large numbers of cases, averaging 127 daily, and was dependent upon the Commissariat and Ordnance Store Departments for its equipment and supplies; Lady STRANGFORD'S hospital was established for a small number of cases, was not opened till its equipment was completed, and, in addition to receiving such supplies as could be furnished from the Government stores, required no sanction for any purchase that was deemed necessary, and had no War Office to which an account of expenditure was to be furnished, and by which it must be passed. We do not for a moment wish to underrate the services rendered by Lady STRANGFORD, or the value of the provision for sick and wounded which was made under her direction; we merely wish to point out how fallacious any comparison of the two establishments must be under such different conditions. We have gone at some length into this part of Lord WOLSELEY'S evidence from a strong feeling of the injustice with which the medical officers have been treated by him. We shall take an early opportunity of calling attention to some of the other portions of the Report.

THOSE who have read the famous Dr. RICHARD MEAD'S original essay on the Poison of the Viper will now read it again by the side of the report of the Venom of Serpents by Drs. WEIR MITCHELL and REICHERT, to which we briefly drew attention last week. MEAD struck the instant attention of the world by the bold and, as it seemed, wonderful experiment of swallowing the deadly poison of the viper, and escaping unhurt. What led to his experiment is rather obscure, but it was done, and the discovery was thereby made that a physical venom of the most potent kind could be received into the stomach and disposed of there as if it were no more than a harmless food. MEAD did more than this. In his day the use of the magnifying-glass was just coming into practice, and he, eyeing the dried poison through such a glass, discovered in it what he very naturally supposed to be fine needle-shaped crystals. He argued about these crystals, and what they did; they were very sharp crystals, and when they got into the blood they pricked and injured, as he thought, the delicate blood-corpuscles, and so caused the death of the blood, and the death also of the owner of the blood—an hypothesis which, in days when the iatro-mathematics held sway, was as ingenious as it was forcible.

Modern readers, perusing the latest researches on physical venom, will see, with curiosity, that MITCHELL and REICHERT rediscover what MEAD called the crystals, and will understand better than the old master why the venom can be so safely swallowed. These latest writers inform us that all the serpent venoms they have examined possess certain common characteristics. In the fresh state, the venoms are in the form of a slightly turbid yellowish fluid, varying more or less in degree of viscidity, odourless, and invariably of acid reaction. In their dried state, they are soluble in water at ordinary temperatures, save for a slight cloudiness, which but slowly settles. Thus dried, they resemble ordinary egg-albumen; and when prepared in small quantities in a porcelain capsule, innumerable radiating lines of fracture occur, which break the mass into long needle-like pieces closely resembling acicular crystals; indeed the resemblance is so striking that the uninitiated are frequently deceived as to the true physical condition of the venom. This doubtless was the deception to which RICHARD MEAD was subjected.

In describing the external symptoms produced by the different crude venoms, MITCHELL and REICHERT observe that such symptoms do not differ radically except in degree. From all alike there is produced some primary heart disturbance, temporarily lowered blood-pressure, fatal enfeeblement of the respiratory centres, local effusion of blood, with lessening or loss of its power to clot, and, when the animal subjected to the venom survives some hours or a day, noticeable breaking down of the capillaries, and tendency to putrescence and gangrene. Of the different poisons, cobra venom is the most intense in its poisoning power, that of the copperhead next, then the venoms of the moccassin and the rattlesnake. In the course of their researches these investigators have been led to consider that

the serpent venom does not contain an alkaloid, as had been surmised by other inquirers, but that it is in every case made up of three distinct proteid bodies, of which two are soluble in distilled water and one is not. The first of these proteids they declare to be a peptone—*peptic venom;* the second a globulin resembling para-globulin—*globulin venom;* the third resembling albumen—*albumen venom.* Respecting the active properties of these particular parts, the following is deduced from the experiments related. The peptone venom, which remains uncoagulated by boiling, which will dialyse, and which responds to all the characteristic tests by which its place in the family of proteids is determined, is poisonous, but is far from possessing all the poisonous characters of the compound venomous fluid from which it is derived, being slower in its action, and producing local effects which are œdematous in character and ultimately putrefactive. The venom globulin, on the other hand, is a poison of such virulence that one-twentieth of a grain of it is sufficient to kill a strong pigeon in the course of two hours, and to give rise, within a few minutes after injection, to enormous infiltration of blood into the neighbouring tissue. But this venom has no effect on the blood-pressure, in which it differs from the venom peptone, under which that pressure is reduced. The albumen venom is doubtfully poisonous, and, on the whole, the full action of the natural or crude venom as it is produced by the serpent may be considered as represented by the two distinctive parts called by the authors peptone venom and globulin venom.

It is very rare to find in so few pages as have been sent us by MITCHELL and REICHERT so much new and valuable information. What they have discovered reaches far beyond the direct object of their inquiry, important as that is of itself alone. They lead us by what they have done into new lines of study regarding all the diseases which originate in organic animal poisons. They show to us that certain animal bodies can themselves, by their own vital chemistry, produce at least two organic poisonous substances, and they strengthen the view of those who have dared to think that the same process of self-production of the organic poisons has a range wide enough to account for all those phenomena of disease which, starting from organic virus, pursue a regular course, and in that course reproduce the virus, by modified physiological action, just as the serpent by natural process reproduces its venomous secretion.

THE sanitary circumstances and the general administration of Nazareth House at Hammersmith were very prominently brought before the public in February last, owing to a report from Mr. COLLIER, the medical officer of health for the Fulham District, in which it was stated that typhus fever had broken out in that establishment, and that it had occurred in connexion with conditions of overcrowding, of bad ventilation, and of such dirtiness about the bodies of the patients as to prevent any diagnosis of the disease. This report received notice in the House of Commons. It had the immediate effect of alienating some of the support on which the institution had for years past depended, and it was regarded as of sufficient importance to call for inquiry by the medical department of the Local Government Board. Mr. SPEAR'S report to the Board and Mr. COLLIER'S reply are now before us.

Nazareth House is described as a home for the succour of the aged poor and of destitute children; it is administered by the Sisters of the Order of Nazareth, and it contains 133 old people, together with 175 children of ages ranging from a few months to sixteen years. Typhus fever appears to have been accidentally imported into the establishment in October last. It was apparently not recognised at the time, and hence it had opportunity of spreading by personal contagion until Feb. 2nd, when the nature of the disease was suspected, and certain precautionary and quarantine measures were adopted. On Feb. 21st Mr. COLLIER visited the institution, and he saw ten cases of fever, seven children and three Sisters of Mercy; but he reported that in the absence of any notes as to the history of the cases, and owing to the dirty condition of the bodies of the patients, it was impossible to form a diagnosis as to what fever they were suffering from. The seven children were removed to the Western District Fever Hospital on Feb. 22nd, and Dr. SWEETING, though regarding the diagnosis in some of the cases as doubtful, yet found sufficient evidence of typhus in others to transfer them next day to the typhus wards at the South-Western Fever Hospital. Dr. SWEETING, in reporting on these cases, says that the children were dirty in the extreme, that they were infested with vermin, and that they were so flea-bitten as to hamper diagnosis. He also adds that he was informed by Mr. COLLIER that only ninety cubic feet of air space was available for each girl inmate of the school. And he continues: "We have in these cases two undoubted factors suitable for the development of typhus—viz., uncleanliness and deficient ventilation." In view of these statements, it is hardly to be wondered at that the institution suffered much in public estimation.

Mr. SPEAR'S report goes to show that the condition of dirt referred to was exceptional. He points out the difficulty in keeping such children as are admitted into Nazareth House free from vermin except by constant attendance; he brings forward evidence to show that the statements as to uncleanliness were exaggerated, and he practically implies that the plea of dirtiness was made use of to cover an inability to diagnose typhus. Fortunately this disease is now so rare that it may not at first sight be so easy of recognition to some members of the profession as it used to be; but Dr. MAHOMED, who saw some of the cases on February 22nd, has stated in writing that he found no difficulty in diagnosing typhus. He also adds that he did not find the persons of the sisters whom he examined unclean, nor their surroundings dirty; indeed he declares the injurious statements which had been made to be "quite unjustified." Mr. WALKER, L.R.C.P., also reports that when he saw the children on February 17th, they were clean and apparently well cared for; also that they were undoubtedly suffering from typhus. It is difficult accurately to decide the points in dispute at this stage. When Mr. SPEAR visited Nazareth House he found but little to justify the allegations of dirt and neglect, and though Mr. COLLIER points out that this would be but natural after the public statements which had been made concerning the establishment, yet, apart from some of the children giving evidence of vermin in their heads, an occurrence by no means exceptional in establishments receiving destitute children, the

whole arrangements of the institution appear to have been such as to indicate an opposite state of things to that which had been at first reported. Mr. COLLIER, it must be noted, does not stand alone in his assertions as to dirtiness, but as regards this it should be remembered that three of the sisters, having ordinarily charge of the children, were at that date lying sick of typhus, and that the care of the children, both sick and healthy, was for the time being handed over to incompetent persons. Viewing the whole circumstances we think that some of the charges as to this subject were correct, but it is more than probable that to a great extent the condition referred to was due to circumstances over which the sisters had for the moment but little control. Mr. COLLIER'S statements derive their principal support from Dr. SWEETING'S evidence, but it is clear that some of this is based, not on personal experience, but on statements which had been made to him by Mr. COLLIER, one of which turns out to be quite incorrect. Thus, instead of the limited amount of cubic space which he spoke of as being allotted to the children, Mr. SPEAR finds that they had in their dormitories from 400 to 600 cubic feet per head, and that the class-rooms afforded some 300 cubic feet a head, besides being well kept and well ventilated. It is also evident that Mr. COLLIER has failed to appreciate the real necessities of children as regards cubic space, otherwise he never could have prescribed 2000 cubic feet as the space for each individual, even granting that many of the children were "maimed, deformed, or otherwise permanently afflicted." Were even an approach to such a standard of cubic space required for children or even for adults elsewhere than in hospitals where all are suffering from disease, the effect would be the depopulation of every institution in the kingdom, and indeed of nearly every household, and the mere circumstance that a proposal was made to give effect to it, coupled with the fact that erroneous statements were made as to the air space actually available, necessarily detract from the value of some of Mr. COLLIER'S other statements with regard to the institution. In a time of grave emergency the general administration of this establishment was doubtless not maintained at a proper standard of efficiency; the existence of typhus was unfortunately not detected soon enough to enable the sisters to prevent its spread, but beyond this we see no cause for blame, and we hope that, whilst the lesson as to the necessity of an improved medical supervision will not be lost sight of, nothing that has passed will for a moment be allowed to interfere with the support which this useful institution has heretofore received, and which we believe it has not ceased to deserve.

THE representatives of the Scotch corporations continue to ply Scotch members, including the Lord Advocate, with strong arguments for giving them increased representation on the Medical Board in Scotland. One is that they license such a large number of candidates. Why, this is the very head and front of their offending. The use of a sieve is not to let through coarse material, but to keep it from getting through. So with an examination. And yet the representatives boast of the number whom they pass, not adding that this number includes largely students educated in other divisions of the kingdom, and, further, largely students who have been rejected in other divisions. The suppression of this feature of "the work done so well," to use Dr. HERON WATSON'S words, is not creditable to the deputation which waited on the Lord Advocate. Further, it can mislead no one who will take the trouble to understand this question to be told that the Scotch corporations reject 47 per cent. on an average. This only confirms the charge that they receive the rejected of other boards, whom for very shame they cannot pass in larger proportion than 53 per cent. Large rejections prove the badness of the material, but by no means the excellence of the examination. Even so fair a speaker as Dr. HALDANE told the Lord Advocate that the cry of unequal examinations has been raised mainly in London journals. We cannot retort the compliment on Scotch journals, which have been singularly slow to denounce the sins of the Scotch bodies which have thrown a wide discredit on Scotch qualifications. But we need not remind the Lord Advocate that the cry of unequal examinations proceeded from men of the highest authority, including Sir JAMES PAGET, and that it has found a place in the Report of the Royal Commission. And there it must remain till the judgment is reversed by equally competent authorities. Dr. HALDANE resents the charge of corporations "selling licences." Will he deny that the Scotch corporations sell, not mere licences, but Fellowships? And if bodies will sell their highest qualifications, their distinctions, is it wrong to believe that they will part on easy terms with their lowest ones? Scotch members will perceive that the honour of Scotland is not to be served by putting Scotch education into the hands of corporations which have such peculiar views of their functions, and which do not educate probably a fourth of the number of students educated in the universities. It is to be regretted that the extra-mural teachers identify their cause and the cause of free teaching with the corporations. We do not believe free teaching to be in the least danger, and we should be the first to denounce any restriction of fair competition in teaching. But competition in examinations is another matter, and calls for a severe remedy in the Government Bill.

Annotations.

"Ne quid nimis."

PHYSIOLOGY AT OXFORD.

ON the 5th inst. the question of voting a sum of £10,000 for building a laboratory, working rooms, and lecture room for the Waynflete Professor of Physiology, Dr. Burdon Sanderson, was brought under the consideration of Convocation, and although opposed by some of the members on anti-vivisection grounds, was, we are happy to say, carried by a majority of three in a house of 193 members. Dr. Burdon Sanderson will thus have the means at his disposal of founding a school of physiology at Oxford, which we hope will flourish as vigorously as that of the sister university.

A letter appears from Mr. C. F. C. West in the *Spectator* of last week in regard to the above matter, which deserves comment, since it exhibits in a striking manner the disposition those who are opposed to vivisection are apt to display. Mr. West states that he is far from imputing to the present professor any carelessness as to pain. Indeed, he quotes the professor's own words that "it should be made as small as possible." Yet Mr. West cannot help indulging in a piece of sentimental writing.

He dreads the extension of vivisection "in the very playground of the university—outside, cricket and little children at play; inside the museum walls, wilfully-inflicted suffering, perhaps of the dog who was their companion and guard yesterday." But let us take the other side of the question. Suppose one of the playful children bitten by the guardian dog suddenly afflicted with madness, and suppose that pain inflicted on a number of dogs resulted in the discovery of a means of saving the one child's life, is there any parent who would not give a wilderness of dogs or monkeys that such knowledge might be acquired! We yield to none in tenderness to animals, and this journal has always inculcated the necessity of prolonged consideration before any experiment involving pain to the brute creation is undertaken, but when the object in view is a clear and definite gain to humanity, we cannot but admit that experiments on living animals may be undertaken by those who are competent to recognise the whole bearing and importance of the lesson that is taught by them.

PROPOSED COLLECTIVE INVESTIGATION IN GERMANY.

IT must be gratifying to all those who are interested in the work of "Collective Investigation of Disease," now being carried on under the auspices of the British Medical Association, to learn that the idea has taken form in Germany. At the meeting of the leading Berlin Medical Society (Verein für innere Medicin), on May 21st, the chairman, Professor Leyden, submitted a report drawn up by Dr. Fraentzel and himself upon the subject. After acknowledging the fact that the idea of collective investigation had been gained from the British Medical Association, the report goes on to propose the lines of an inquiry into phthisis on a far more extended plan than that undertaken recently in this country, which it may be remembered was limited solely to the question of contagion. The following subjects were formulated:—1st. The heredity of pulmonary phthisis, to include not only those who have inherited the disease, but also those members of a predisposed family who escape, with an enumeration of the age, sex, and special conditions under which the disease arises. 2nd. The contagiousness of phthisis, as borne out by facts bearing on its communicability from husband to wife, and *vice versâ*; its spread in hospitals, workhouses, and prisons, through the medium of foul linen, clothing, dwellings, &c.; and from tuberculous animals, especially through their milk. 3rd. The curability of phthisis, in which the histories of the cases are to be especially studied, with reference to diagnosis and the positive evidence of cure. 4th. The passage of genuine pneumonia, characterised by rusty sputum and a typical course, into true phthisis. These questions it is proposed to circulate widely among practitioners and medical Societies, which will become centres of observation. The special circumstances of each patient are to be briefly recorded, together with an account of the course of the disease, of the physical examination of the lungs, and, as far as possible, the results of the examination of sputa for elastic fibres and bacilli, the method employed for the detection of the latter being stated. The collected returns will be finally analysed by a committee. The report was to be discussed at the following meeting of the Society.

FIRES IN THEATRES.

THE sweeping remark of a recent speaker on the subject of "fires in theatres," to the effect that no sufficient reform can be expected until the existing edifices have been destroyed, has so much of truth in it as may be expressed by the confident assertion that neither the proprietors of places of amusement nor "the powers that be" are likely to make such changes as are necessary to reduce the risks of fire to a minimum until, or unless, there be an opportunity of starting *de novo* in the work of construction. "Vested interests" are practically insurmountable and overwhelming. Witness, for example, the rebuilding of Alhambra on the old lines and principles, although both were condemned. We quite agree with Mr. Walford that the only safe plan is to build theatres, and other places of public concourse, in detached blocks, and although a considerable sacrifice of capital must be involved, we do not think they ought to be skirted by shops, though these may structurally form parts of the principal edifice. Every theatre should have broad and *level* means of egress for each part of the auditorium to spacious chambers outside, or to the open air, without the intervention of narrow passages or stairs of any kind. Even a few steps on a bridge may, as we know, form a death-trap in case of panic. Public safety is a paramount consideration, and those who cater for the public amusement—to their own great advantage—should be compelled to adopt such measures as will suffice to put an end to all avoidable perils.

INFECTIOUS HOSPITAL AT CAMBRIDGE.

IT is a matter of regret that it is rarely, if ever, possible to find a site for an infectious hospital which is free from objection on the part of owners of neighbouring properties. Such institutions, like sewage farms, elementary schools, cemeteries, and workhouses, are admittedly necessary, but each person urges that they should not be placed near any property in which he is interested. This, doubtless, is the secret of the agitation which has been got up at Cambridge against a site near the Mill-road. Both at the Improvement Board and in public meeting strong protests have been raised against the choice of site, and the allegations made were those which are always resorted to. In the first place, the removal of patients along the roads leading to the hospital would, it was stated, lead to the spread of infection. If this were so, it might be an argument against the provision of any hospital at all for infectious diseases, and we might prefer the alternative of leaving cases of fever to remain as hitherto, all but, or altogether, uncontrolled in their own homes; but since patients must in every town be removed along the streets, wherever the hospital is placed, we are glad to know that there is abundant evidence to show that in a properly supervised and constructed ambulance such patients may be conveyed to hospital without risk to the community. Others appeared to fear the hospital as such, and spoke of the terrible results of unknown contagion. In Cambridge, however, no attempt is being made to provide for the isolation of any large number of infectious sick; the hospital being intended to receive those patients who are first attacked, and thus to prevent the occurrence of any large prevalence of infectious illness, and in this way it must be obvious that the community will be materially benefited. Again, the sanitary authority, who have been many years seeking a proper site, have selected a piece of land which is 165 yards from any residence, and at least seventy yards from any footpath; and in deciding as to its final acquisition they have the full concurrence of their own officer of health and of an inspector from the medical department of the Local Government Board. Dr. Cooper, who appears to have led the opposition, pointed out the uselessness of a building into which the sanitary authority would have no power to remove any patient who was unwilling to go. As to this, the Commissioners have precisely the same powers as any other sanitary authority—that is to say, that subject to a patient not having proper lodging and accommodation, his removal can be effected under a magistrate's order. Experience has, however, shown that compulsion is rarely needed, and that the use which is made of a properly constructed

and properly managed infectious hospital is far in excess of anything that was in the first instance anticipated. That a level railway crossing should intervene between the site and any part of Cambridge is to be regretted, especially if this arrangement is likely materially to hinder the progress of the ambulance; but the decision no longer to defer the erection of a hospital is to the credit of the commissioners.

THE EFFECT OF TOBACCO ON CHILDREN.

DR. G. DECAISNE has submitted to the Society of Public Medicine the results of some interesting observations concerning the effects due to the use of tobacco among boys. Thirty-eight youths were placed in his charge, whose ages varied from nine to fifteen, and who were in the habit of smoking, though the abuse of tobacco varied in each case. The effects of course also varied, but were very emphatic with twenty-seven out of the thirty-seven boys. With twenty-two patients, there was a distinct disturbance of the circulation, bruit at the carotids, palpitation of the heart, deficiencies of digestion, sluggishness of the intellect, and a craving, more or less pronounced, for alcoholic stimulants. In thirteen instances there was an intermittent pulse. Analysis of the blood showed in eight cases a notable falling off in the normal number of red corpuscles. Twelve boys suffered frequently from bleeding of the nose. Ten complained of agitated sleep and constant nightmare. Four boys had ulcerated mouths, and one of the children became the victim of pulmonary phthisis, a fact which Dr. Decaisne attributed to the great deterioration of the blood produced by prolonged and excessive use of tobacco. As these children were all more or less lymphatic, it was not possible to establish a comparison according to temperament; but of course the younger the child the more marked were the symptoms, and the better-fed children were those that suffered least. Eight of the children in question were aged from nine to twelve years. Eleven had smoked for six months, eight for one year, and sixteen for more than two years. Out of eleven boys who were induced to cease smoking, six were completely restored to normal health after six months, while the others continued to suffer slightly for a year. Treatment with iron and quinine gave no satisfactory result, and it seems tolerably evident that the most effective, if not the only cure, is to at once forswear the habit, which to children in any case is undoubtedly pernicious.

FRENCH CRITICISM ON LONDON SANITATION.

THE first result of the visit to London of the Technical Commission appointed by the Paris Municipal Council is an able report by Dr. E. Vallin, Professor of Hygiene at the Val de Grâce, on sanitary matters in the metropolis. On the whole the learned professor finds more to praise than to criticise, but he is severe on the London water-supply. The great conception realised by Belgrand, who went to their sources in Champagne, and there captured the waters of the Vanne and the Dhuys, to bring them, and this under cover, all the way to Paris, is far more worthy of a great modern city than our expensive and futile efforts to filter the contaminated waters of the Thames. At the filtering-beds of the Southwark Waterworks Dr. Vallin was very unfavourably impressed by the presence in their immediate neighbourhood of large dust-sorting yards, of crowded thoroughfares, and of railway lines. Gas metres were also close at hand, and it is pretty evident that the dust blowing from all these sources must be heavily charged with microbes that would inevitably fall on the filtering-beds. On the other hand, Dr. Vallin prefers the English system of distributing the water to that in vogue in Paris. We have an abundant supply for all domestic purposes, and are able to effectively flush house drains and public sewers, while in Paris, in 1879, there were no less than 30,000 houses that had no water-supply whatsoever. The water-supply of Paris is, nevertheless, greater than that of London. Dr. Vallin, basing his calculations on the figures given by Colonel Bolton, concludes that the average water-supply of London amounts to only 150 litres per head per day, while that of Paris is at the present 164 litres, and this will be augmented to 180 litres in the course of a few weeks by means of the new waterworks now nearly completed. Yet all who know Paris are aware that in the majority of closets there is no water, and this even in high-class houses, where there is a constant water-supply in the kitchen. The difference is due simply to the fact that from 78 to 81 per cent. of the London water is supplied and consumed within doors, whereas in Paris only 18 to 22 per cent. of the water goes inside the houses. Three-quarters of the Paris water is squandered in watering the streets, in supplying magnificent public fountains, and in maintaining the external cleanliness and splendour of the town at the sacrifice of domestic comfort. Dr. Vallin dwells at length on the house drainage of London, principally for the purpose of showing its superiority, and recommending his French readers to imitate English methods; but when speaking of the London sewers, he denounces them as filthy, as giving rise to the foulest odours, and as not always of the most recent and best construction. Nor are the London streets as clean or well kept and brushed as the streets of Paris. Dr. Vallin's compliments and criticisms can hardly fail to exert a favourable influence on both French and English sanitation, and we congratulate the able editor of the *Revue d'Hygiène* on the good use he made of his time while in London.

FUNCTION AND STRUCTURE.

AT a recent discussion before the Academy of Medicine the problem of the identity of action between the living tissues of animals and of men was raised; the similarity was maintained by M. Bouley, and denied by M. Béchamp. In support of his argument M. Béchamp referred to the presence of a ferment in human saliva which was able to convert starch into dextrine, whilst the same fluid of the dog and the ox did not possess this property. Moreover, the structure of the human breast, as well as that of the cow and the goat, was practically the same, and yet each yielded a different sort of milk. It was also advanced that although the structure of certain tissues might be dissimilar, yet their function might be the same. In the face of these reasons M. Béchamp considered it illogical to argue from man to animal, either anatomically or physiologically. What is the precise scientific value of these assertions? As every student of biology knows, in the process of evolution, whether carried on throughout the ceaseless roll of ages, or witnessed in the short moment of individual development, function precedes structure. A legitimate corollary from this generalisation would be the proposition that the properties of a tissue are more delicate tests of its nature than the structure. There seems to us to be no doubt that the general principle above given is based only on the imperfection of our senses. It is more than probable that molecular structure goes hand-in-hand with function; a change in property is accompanied by a corresponding variation in the arrangement of the constituent atoms of a molecule. The bearing of these considerations on the question discussed at the Academy is explained when we consider that, in every being, every cell and every molecule of a cell has its own individual characters stamped on it by long hereditary action. We may therefore see some reason for believing in the possible dissimilarity between the protoplasm of homologous organs in different members of the animal kingdom, whether of the

same species and genus or of altogether other species and genera. The occurrence of idiosyncrasies in the same family of men may thus be established on the basis of a yet embryonic molecular physiology.

THE BALFOUR MEMORIAL FUND.

WE learn from the *Cambridge Chronicle* that a meeting was held on the 26th ult. of the subscribers to the fund, which, in accordance with a resolution passed at a public meeting held in Cambridge last October, has been raised to the memory of the late Francis Maitland Balfour, Professor of Animal Morphology in the University, and which is to be devoted to the encouragement of original biological research. Amongst those who were present were the Vice-Chancellor of the University (Dr. Porter), ProfessorNewton, Dr. Michael Foster, Mr. J. W. Clark, Dr. Marshall, of Owens College, Manchester, Dr. Dobson, of Netley, Dr. Anningson, the Rev. Coutts Trotter, and Mr. Henry Jackson, M.A. After a few kindly remarks from the Vice-Chancellor, Mr. J. W. Clark, the treasurer, read a report, from which it appears that the subscriptions promised amounted to £8309 0*s.* 7*d.*, of which no less than £8129 0*s.* 7*d.* had been paid in, whilst a sum estimated at £100 will probably be transmitted from America by Professor Newell Martin, of the Johns Hopkins University. The expenses had been small, amounting altogether to £157 6*s.* 6*d.* There is reason to believe that when all the subscriptions have been paid in, the income of the fund will amount to about £300 per annum. Dr. Michael Foster, in moving the first resolution, stated that the committee originally appointed to collect subscriptions and draw up the conditions for the administration of the fund had fulfilled their duty, and the regulations were now submitted to the meeting. It was proposed that there should be a small committee, amongst whom should be the present treasurer and Mr. Balfour of Trinity College. It had been found difficult to throw the studentship open to the world, and, at the same time, to connect it with the university; but this difficulty had been overcome by one of the regulations, in which it was stated that "the place and nature of the studies of the student shall be subject to the approval of the managers, provided that the student shall be bound to pursue his studies within the university during, at least, three terms during his tenure of the studentship, unless the managers shall, with the approval of the board, dispense with this requirement for special reasons. The managers shall take such steps as they may think necessary to satisfy themselves as to the diligence and the progress of the student, and may require from him any reports or other information on the subject of his studies which they may think desirable." It was hoped that the student would thus be brought into close personal relationship with the university. In some remarks subsequently made by the Rev. Coutts Trotter it was pointed out that one of the regulations was that the regulations now placed before the meeting might be altered by the university after a period of five years, with the exception of certain fundamental regulations, and these again were liable to be altered after fifty years—a wise and prudent proposal. The money subscribed has been judiciously invested.

"PRESCRIBING DRUGGISTS."

UNDER this heading Dr. Donald Hood has called public attention to the peril resulting from failure to recognise infectious disease in its earliest stages. Servants apply to druggists who, with the best intentions but inadequate knowledge, prescribe without perceiving, or having the power to perceive, that the maladies they treat are infectious. Dr. Hood narrates the case of a family infected with diphtheria in consequence of the mistake of a druggist who assured a servant of the household that she was suffering from "ulcerated sore-throat" when she was actually affected with this formidable and most communicable disease. Such cases are common. Whooping-cough, measles, and a host of maladies are brought into houses by servants, who, being indisposed, seek advice of neighbouring chemists. There is no remedy for this evil except the honest refusal of druggists to prescribe. We fear it is vain to hope for such an exercise of honesty. Counter-practice is rife everywhere, in the shops of the West-end as in those of the East-end. Will the Pharmaceutical Society take this matter up seriously, or must the medical profession, in defence of the public, appeal to the Legislature to compel a respectable class of men from exceeding the legitimate limits of their calling, and thus rendering their establishments traps for the unwary and conservatories of disease?

INFECTIOUS PNEUMONIA.

ATTENTION is drawn in a report presented by Mr. Harold Palmer to the Newtown and Llanllwchaiarn urban sanitary district, to a prevalence of pneumonia which strongly resembles similar outbreaks which have been regarded as of an infectious character. A strong and healthy male adult was in June last year suddenly seized with a severe form of pneumonia, which rapidly assumed a so-called typhoid character. The general symptoms raised a suspicion that the disease was of a septic nature, and due to faulty sanitary conditions; a view which was confirmed as the result of an inspection of the house. Having regard to these facts, prompt measures were taken to do away with the unwholesome drain conditions which had been found, but the medical practitioner in attendance, as also two other persons, were seized with the same disease, and two of the cases, including that of the medical man, proved fatal within a few days. In all the four cases the pneumonia was double, and the patients were male adults. This is by no means the first instance in which a similar result has followed on a first case of this disease. Indeed, a single visit to a house where this form of pneumonia has prevailed has been attended by the occurrence of urgent lung inflammation within a few days, death speedily resulting. It is always possible that the disease may, as regards causation, be similar to enteric fever, and that the pneumonic condition, which as a rule supervenes at a later stage, may, when it takes precedence of the bowel and other lesions, assume a specially virulent character, masking the more ordinary symptoms, and having, as a rule, a rapidly fatal termination. Further experience, however, as to the disease is needed before any decided opinion can be expressed on this point.

THE GROCERS' DISCOVERY PRIZE.

THE first of the Discovery Prizes of £1000 is offered for the best solution of the following problem:—"To discover a method by which the vaccine contagium may be cultivated apart from the animal body, in some medium or media not otherwise zymotic; the method to be such that the contagium may by means of it be multiplied to an indefinite extent in successive generations, and that the product after any number of such generations (so far as can within the time be tested) prove itself of identical potency with standard vaccine lymph." The competing treatises must be sent in on or before December 31st, 1886. The Scientific Committee, composed of Mr. Simon, Drs. Burdon Sanderson, Buchanan, and Tyndall, has advised the Court of the Grocers' Company in the selection of this subject, and the Essays will be adjudicated upon by them. Should the inquiry it is thus sought to stimulate be successful, a work of very great value will have been achieved, and the result will be of particular utility as meeting the one objection to vaccination which has

a real influence among people generally. It is utterly impossible to foresee the result of such an inquiry. But the fact that this problem has commended itself to such an able Scientific Committee may be taken as an indication that its solution is not a vain dream. We trust that both the importance of the subject and the value of the prize may stimulate patient and careful inquiry on the part of those best qualified to conduct it, and that the object aimed at in the establishment of this scientific endowment may be amply achieved.

VIVISECTION.

THE return moved for by Mr. Hibbert, showing the number of scientific experiments performed on living animals during 1882 under licences granted under the Vivisection Act, has been issued. In England and Scotland, of forty-two persons holding licences, only twenty-six availed themselves of them for vivisectional experiments. The total number of experiments was about 406. Of these 118 were performed under the licence alone; 29 were experiments in illustration of lectures, in which the use of anæsthetics was compulsory; 229 were experiments conducted without the use of anæsthetics, and of this number 14 were entirely painless, as there was no operation at all, and in 204 the operation consisted of the inoculation of a morbid virus or the administration of hypodermic injections of therapeutic substances. In 40 experiments the obligation to kill the animal experimented on before its recovery from the anæsthetic was dispensed with, and of these in 23 cases the operation consisted of the administration of a hypodermic injection or the introduction of the substance experimented with into a subcutaneous vein; in 12 of the cases the operation was more extensive, but the actual suffering inflicted was only that attendant upon the healing of a healthy wound. The inspector accordingly reports that "the amount of direct pain or suffering inflicted in the prosecution of physiological, pathological, and therapeutical researches during the past year was altogether trifling, and limited to between twenty and thirty animals, mostly frogs." Only two certificates permitting experiments on mammalia were held, and during the year there were no experiments on horses, mules, or asses, nor any experiments for the purpose of testing previous discoveries. No experiments were carried out in Ireland during the year, although five persons hold licences under the Vivisection Act.

THE GOYDER MEMORIAL PRIZE.

"WHEN you subscribe to a memorial, see that you get it." It might be thought that this advice was superfluous; it appears, however, from the letter of our Newcastle correspondent, that it is not always so. A few months ago, a movement was commenced in that town to commemorate the name of Mr. Goyder by the establishment of a prize for students. Mr. Goyder was intimately connected with the Newcastle Infirmary as house-surgeon, and soon after his commencement as a private practitioner in the town his life was cut short by typhus fever. It was appropriately suggested at the early meetings of the committee appointed to carry out the object that the prize should be awarded for proficiency in clinical surgery in connexion with the infirmary, and the subscriptions were asked for and obtained to this end. The executive committee now propose that no student be admissible to the examination "unless he be a perpetual student of the College of Medicine, Newcastle-on-Tyne." This proposition has caused some feeling amongst the subscribers, and also amongst the students at Newcastle. There is no reason in the world why a pupil should be perpetual at the Newcastle School in order to show himself worthy to compete for a clinical prize at the infirmary. We therefore hope that the suggestion of our correspondent at Newcastle may be attended to—namely, that this rule as to perpetual studentship at the School be rescinded or modified. The Newcastle School owes its present position to its excellent general infirmary and the variety of practice to be seen within its walls, as well as to the facilities for obtaining licences and degrees in connexion with the University of Durham now afforded its pupils; but it has also inherited a prestige, worthy too of preservation, from the large-minded and liberal careers of Fife, White, and Charlton. We hope to be able to revert to the Goyder memorial when it assumes a more satisfactory aspect than at present.

VOLUNTEER MEDICAL ORGANISATION.

A MEETING of the Executive Committee was held on Friday, June 1st, at Charing-cross Hospital. The secretary stated that considerable progress had been made in the movement, favourable expressions of opinion having been received from a great many hospital surgeons and physicians in London and the provinces. Volunteer surgeons to the number of fifty-one had already placed their names on the general committee, and all the medical schools have now representatives on either the executive or general committees. The secretary was directed to convey to Messrs. Savory and Moore the thanks of the Committee for the kindly grant of twenty field haversacks complete, for the use of the Ambulance Company at Charing-cross Hospital. The National Aid Society have very courteously allowed the Organisation to hold committee meetings at, and to have letters addressed to, their offices at 5, York-buildings, Adelphi. Besides Charing-cross Hospital, where a trained company already exists, St. Bartholomew's is about to take up the movement on a large scale. The London and St. George's are also moving in the matter.

NOTIFICATION OF INFECTIOUS DISEASES AT BATH.

ALL the medical men in active practice in Bath, excepting three, have signed a memorial against making the notification of infectious diseases compulsory on medical men. This memorial came before the sanitary committee when proceeding to discuss a report of a committee for considering the subject. This special committee reported in favour of taking powers, under either a general act or a provisional order, to require notification in the following diseases only and in the following way:—

"Small-pox, scarlet fever, typhus fever, typhoid fever, cholera and diphtheria. That the duty of notification shall be upon the head of the family, or person acting in that capacity, in which the disease exists. In every case where a medical attendant shall attend a patient suffering from any such specified disease he shall immediately give a certificate on the prescribed form to the head of the family or person acting in that capacity, who shall within six hours deliver such certificate to the general inspector at his office. Such certificate to contain amongst other particulars a statement by the medical attendant whether proper and sufficient means of isolation and disinfection are to be obtained at the residence of the patient, and will be carried out, or whether it is advisable in his opinion that the patient be removed to the Statutory Hospital. A sufficient number of forms will be sent gratis to each medical practitioner in the district. A fee of 2*s.* to be paid to the medical practitioner for each certificate on the prescribed form, and a fee of 6*d.* to the bearer of such certificate to the general inspector."

We cannot approve of requiring more from the busy medical man than a statement or certificate to the householder of the existence and nature of infectious disease in his house. To require him to go into particulars of the house and case is to require too much, even for the tempting fee of 2*s.* We cannot see, as some of the memorialists seem to do, that there is any undue violation of personal liberty in

the sanitary authority, acting for the whole community, requiring to be informed of the existence of disease dangerous to others. If a man's house is on fire, and he refuses to have it put out as quickly as possible on personal liberty principles, we should entirely excuse the municipal or fire brigade authorities acting as energetically as possible without his consent. A man's liberty is not to involve risk to others. This is already abundantly admitted in law and in common sense. A man with small-pox has the natural liberty to travel in a cab or an omnibus; but society has a right that overrides his natural liberty, and says he shall not. He may equally convey disease to others through his house or his business; and society will certainly not rest till it has reduced this personal liberty to a minimum in the case of grave diseases. It should do so with great consideration for the individual, but with more for the community in which he is only a unit.

ATTENUATION OF VIRUS.

OXYGEN is not a necessary factor in the attenuation of charbon virus according to M. Chauveau. Complete transformation of the virus can be effected in its absence and at various temperatures. M. Chauveau has introduced three adjectives to simplify description—agenesic, eugenesic, and dysgenesic. These terms are applied respectively to conditions which are destructive, favourable, or harmful, to the *cultivation* of the bacillus. Deprivation of oxygen is essentially an agenesic condition, and this is a conclusion almost quite opposite to that of M. Pasteur. Cultivation liquids prepared for attenuation are modified in a remarkable manner under the influence of heat alone. From zero up to 50° C. this influence is at its greatest—that is to say, the death of the microbes takes place in periods varying from fifteen or twenty days to a few hours. According to M. Bert, an increase in the tension of oxygen is also of agenesic influence. If the degree of heat go out of the bounds of eugenesis, it becomes first dysgenesic, then agenesic, and finally exercises a powerful attenuating action whether by itself or in the presence of oxygen.

LONDON NOISES.

A CORRESPONDENT calls attention to the nuisance of noises arising from the barking of dogs, the crowing of cocks, the cackling of ducks, the screeching of parrots, the sudden striking up of drum-and-fife bands, &c., in London. This nuisance is very great. It is a perpetual source of annoyance to the well and injury to the sick. The old dogma, "every Englishman's house is his castle," is a thoroughly selfish one, and it has become so organised in the hereditary brain that householders are wont to regard only their own pleasure. If a man is not himself sensitive of noises, he cares nothing for his neighbours. It would be well if the law could be enforced in cases of this class; and if what may not be very great nuisances, in a technical sense, but are practically grave sources of injury, could be resolutely and promptly removed.

A YEAR'S WORK IN OVARIOTOMY.

DR. HOMANS of Boston has published under the above title a short paper containing an account of twenty-five successive cases in which he had performed ovariotomy, and some of the cases present points of considerable interest. In one case both ovaries were removed and the patient continued to menstruate regularly a year afterwards, but not only did she menstruate regularly, but menstruation was accompanied by more pain than before the operation. Many cases have been recorded in which menstruation has returned more or less regularly after removal of both ovaries, but the fact that the suffering after was more severe than before the operation, tells against Battey's operation for the relief of dysmenorrhœa. In one instance the patient was attacked with dyspnœa on the fourth day after operation, and the left pleura was found full of fluid. Forty ounces were withdrawn by aspiration, and the patient made a good recovery. Two subjects were attacked with phlegmasia alba dolens—one on the twelfth and the other on the nineteenth day after operation, in consequence apparently of physical exertion. The limb attacked in each case was that on the side opposite the diseased ovary. These cases are rare and well worthy of being placed on record.

PARKES MUSEUM.

THE opening lecture on June 1st, by Professor De Chaumont, and which we give in another column, was well attended by an audience largely composed of well-known sanitarians. Dr. Crawford, the Chief of the Army Medical Department, presided, and at the close of the lecture the Hon. Dudley Fortescue, Mr. R. Rawlinson, C.B., and Sir Joseph Fayrer made, in proposing the customary votes of thanks, some interesting remarks *à propos* the museum and its objects. We were glad to notice several ladies amongst the audience. Professor Hayter Lewis will lecture next Wednesday afternoon, at 5 P.M., on "The Employment of Artistic Materials in the Architecture of Houses and Hospitals." The lecture will be illustrated by objects in the Museum.

CEREBRAL ATROPHY AFTER AMPUTATION.

AN old soldier had his left arm removed forty years before his death. During the last few years of his life the leg on the same side of the body became gradually paralysed. At the autopsy M. Bourdon found a notable wasting of the upper part of the ascending frontal convolution, of the paracentral lobule, and of the neighbouring crest of the cerebral hemisphere. The lateral ventricle of the same side was dilated, especially at the site of the atrophy. Some wasting was also observed in the corpus striatum, the pons, and the medulla oblongata of the same side. The right hemisphere is said to have weighed thirty-one grammes less than the left. It is right to speculate as M. Bourdon did on the cause of the late paralysis of the lower limb. Was it due to a spread of the atrophic change in the central nervous system? Such a conclusion is not out of harmony with the present doctrines of neural pathology.

HOSPITAL HORSE AMBULANCES.

WE are very glad to learn that the committee of the Northern Hospital of Liverpool has determined by a unanimous vote to establish a horse ambulance service in connexion with the hospital. Those who can compare the present arrangements—or rather absence of all arrangements—for the conveyance of injured persons to our hospitals, with the excellent system that is so efficiently worked in America, will gladly hail this announcement. There is an undoubted need for these horse ambulances, and every practical experiment which can show how best the need can be met in our large cities is eminently worthy of support, and we trust the committee of the Northern Hospital will be successful in their appeal for the necessary funds.

HYGROMA OF THE TONGUE.

IN connexion with the case of dermoid cyst of the tongue, related by Mr. Barker at the last meeting of the Clinical Society, a case recorded at a recent meeting of the New York Surgical Society by Dr Gerster is of interest. The patient was a girl, about thirteen years of age, who had had a swelling in the tongue from quite early childhood. The tumour was the size of a large walnut, situated in the left side of

the tongue, quite at the back. The tumour was tapped, and then the diagnosis of hygroma was made. Dr. Gerster determined to remove the cyst wall, and with this aim he ligatured the left lingual artery, then drew the tongue well forward out of the mouth, exposed the tumour by an incision along the edge of the organ and dissected out the cyst wall with scissors. The hæmorrhage was very slight. The wound was mopped out with a five per cent. solution of carbolic acid, and its edges stitched together with very fine silk. A piece of gauze powdered with iodoform was placed between the tongue and gums, and retained there for thirty-six hours. The wounds both united by first intention.

THE THREE TOWNS FRIENDLY SOCIETIES' INSTITUTION.

THE discussion of the merits of this institution continues in the local newspapers, and elsewhere, to be warm. The profit made, not by the medical men of the institute, but at their expense, is 22 per cent. This may be very pleasant for the trustees and members; but, considering the small remuneration for medical services, is from our point of view very unsatisfactory. It is not pleasant to see working men clubbing together to lower the price of medical labour, and to break up old family and club relations. Though we strongly advise medical men to allow no personal feelings to hinder them from acting as their own professional instincts lead them in circumstances of emergency, we must be permitted to denounce a system which first attenuates medical fees to a minimum and then diverts them from the medical officers and applies them to the general benefit of the members, and, which caps all this injustice, by an indiscriminate admission of unfit members.

MEDICAL STUDENTS AND THE BILL.

WE have always maintained that it would be most unfair not to give the Licentiate of the new Board a simple title which he can use and register. The statements made to Mr. Mundella by the Medical Union Society, fairly representing the medical students of London, and doubtless those of the country too, could not fail to impress the Vice-President of the Committee of Education with the reasonableness of their claim, and we shall hope to find it duly recognised as the Bill passes through the House of Commons.

PORRO'S OPERATION.

IN the Obstetric Clinique of the Maternity at Milan, Professor Porro, for the fourth time, performed his well-known operation for the removal of the gravid uterus and its contents. The pelvis was greatly contracted in consequence of rickets, and pregnancy had advanced to the middle of the ninth month. The operation occupied twenty minutes, and was unattended with hæmorrhage. According to the *Gazzetta degli Ospitali* the mother was progressing favourably at the end of a week.

THE COLLEGE ELECTION.

THE election to the Council of the Royal College of Surgeons will take place on Thursday, July 5th. No official list of candidates has yet been published, but it is probable that for the three seats which will be vacant there will be at least seven candidates, of whom two may be provincial Fellows. Mr. Cooper Forster is the only retiring councillor who will seek re-election.

PROFESSOR HUXLEY will deliver the Rede Lecture at the Senate House, Cambridge, on June 12th, the subject being, "The Origin of the existing forms of Animal Life: Construction or Evolution."

WE understand that the term of office for which Dr. Vavasour Sandford was appointed medical officer of health for the Herefordshire district expires in September next. Dr. Sandford, however, who has twice been re-elected to the post, offers himself for reappointment. As recently as last month one of the constituent authorities recorded its special appreciation of the value of his services, and the others have at intervals during his term of office taken occasion to express a similar opinion.

MR. HARRIS BUTTERFIELD, who has for many years past rendered signal service to the borough of Bradford as medical officer of health, has, we understand, been selected to fill the same post for the West Kent Combined District. The appointment is one which is certain to result in the increased sanitary prosperity of that portion of Kent which will now come under Mr. Butterfield's supervision, and it is in every respect satisfactory.

THE physicians and surgeons of the Massachusetts General Hospital announce that the Warren Triennial Prize for 1886 is offered for a dissertation on "some subject in physiology, surgery, or pathological anatomy." The subject for the present year was, "Chronic Bright's Disease: the Nature and Mutual Relations of the Derangements in the Circulatory and Secretory Organs." No award, however, has been made.

THE municipality of Acquapendente asks co-operation from other Italian towns and from public institutions in the establishment of a monument to the memory of Geronimo Fabrizio, surnamed "d'Acquapendente," more commonly known as Fabricius ab Acquapendente, the great anatomist, to whom we are chiefly indebted for the discovery of the valves of the veins.

LAST week a vessel arrived in Dublin Bay with a case of small-pox on board. Drs. Cameron and Byrne, having inspected the vessel, had the infected person removed to the hospital ship and the vessel placed in strict quarantine. Every means has been taken to prevent the spread of infection.

THE Medical Board is to-day (Friday) to elect a surgeon to the Adelaide Hospital, Dublin, in the room of the late Mr. B. Wills Richardson. There are three or four candidates for the post, which it is probable will be conferred upon Mr. Warren, the assistant-surgeon.

MR. J. KNOWSLEY THORNTON has been elected an Honorary Fellow of the American Gynecological Society.

THE Harveian Oration will be delivered by Dr. Habershon, at the College of Physicians, on the 27th inst., at 4 P.M.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.—A meeting convened by the promoters of this Association was held on Wednesday at the residence of Sir C. and Lady Trevelyan. Mr. W. H. Smith, who presided, explained the object of the Association. Mr. Stansfeld, M.P., proposed a resolution recording the opinion of the meeting that great public advantage had attended the successful establishment of self-supporting and self-governing provident dispensaries. Mr. W. Bousfield, in supporting it, mentioned that the dispensaries already opened had been joined by 7000 members, and as many of these had families, the number of persons now entitled to medical treatment amounted to about 15,000. The annual income of the existing dispensaries was £2500. The motion was agreed to unanimously.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

St. Asaph (Rural).—This rural sanitary district has an area of 84,247 acres, and the medical officer of health (Mr. J. Lloyd-Roberts, M.B.) in his annual report for 1882 estimates that the population of the district in the middle of that year was 15,421 persons. The facts given in this report afford on the whole satisfactory evidence of sanitary condition, but the statistics supplied are singularly meagre. We fail to find either the birth-rate or death-rate for the year dealt with, although it is stated that they showed a decline of 2 and 3 per 1000 respectively from the rates in the previous year; we calculate, however, from the facts given that these rates were equal to 26·2 and 17·1 per 1000. As it appears that annual reports have been issued for some years, and we are told that there was no decline in the sanitary condition of the district from the standard that has been maintained in recent years, it is much to be regretted that the report should not give us a table of comparative statistics for a series of years. The figures for a single year for so small a population as that of this sanitary district are of little value as a test of sanitary condition. The marked increase of infant mortality, and the large proportion of uncertified causes of death, are unfavourable features in the report. The mortality from zymotic diseases was exceptionally low, and there can be little doubt that if the practical suggestions in the report for improving the sanitary condition of some of the villages in the district are fruitful of action on the part of the rural sanitary authority, the present low death-rate of the district may be further reduced.

Hanley (Urban).—The population of this Staffordshire borough, which increased from 31,953 persons in 1871 to 48,343, is estimated by the medical officer of health (Dr. J. Swift Walker) for the purpose of his annual report for 1882, at 49,518 in the middle of that year. This estimate is based upon the rate of increase that prevailed between 1871 and 1881, and, as Dr. Walker states, that there are now 9740 inhabited houses in the borough, against 9038 in 1881, there appears good ground for believing that the population cannot be over-estimated. We can scarcely agree with Dr. Walker that the population question is not a subject immediately connected with his department, since the value of every calculated rate in his annual report depends upon the accuracy of his estimate of population. The birth-rate in the borough has shown a marked and comparatively steady decline, from 47·2 in 1872 to 39·5 in 1882. The death-rate showed an increase upon the low rate in 1881, and was equal to 22·3 per 1000; this rate was, however, 1 per 1000 below the mean rate in the ten preceding years, and corresponded with the average rate in the twenty-eight large English towns dealt with in the Registrar-General's weekly return. The most unsatisfactory feature of this report is the excessive proportion of infant mortality. The deaths of infants under one year of age to births registered was equal to no less than 20·6 per cent., against 19·2 and 17·9 per cent. in the two preceding years. The average proportion of infant mortality in the borough during the ten years 1872-81 was 18·6 per cent.; while the mean proportion during last year in the twenty-eight largest English towns did not exceed 16·2 per cent. Such waste of infant life in Hanley calls for investigation, and deserves the serious attention of all interested in the sanitary and social welfare of the borough. The zymotic death-rate in the borough last year was equal to 3·1 per 1000 of the estimated population, the fatality both of scarlet fever and enteric fever showing a considerable increase upon that recorded in recent years. The proportion of puerperal mortality was also excessive. No less than 4·5 per cent. of the causes of death within the borough were uncertified. The report contains all the necessary statistical information for estimating the sanitary condition of the borough; and several features in these statistics, especially the high rate of infant mortality, call for the earnest attention of the Town Council as the sanitary authority for the borough.

Doncaster combined district. — Dr. Mitchell Wilson addresses a general report to the combined authorities and also a separate one as to each of the constituent districts. The former one is in the main taken up with a description of the advantages attendant upon the provision of adequate means of isolation as shown by the official report of the Local Government Board on this subject, a provision which the district in question is much in want of. At Goole a building formerly belonging to the workhouse is in use for the Goole urban and rural districts, and although it has been of signal use, especially as regards the rural district and in the case of paupers, yet it appears that, as heretofore, the situation of the building has materially interfered with its utility. In the Doncaster rural district, where no proper means of isolation are available, as many as 120 cases of scarlet fever occurred. The same disease was prevalent in parts of the Tadcaster and Selby rural districts, and in other districts localised outbreaks of diphtheria and enteric fever were needlessly diffused by reason of the difficulty of properly isolating the patients. The death-rates for the several districts varied from 14·2 per 1000 in the Tickhill urban district, to 22·6 in the Goole urban district, and although a large amount of sanitary work appears to be in progress in the latter district, yet it is quite evident that the sanitary circumstances of the place must be held responsible for a good deal of the preventable sickness and mortality prevailing there. Throughout the combined district steady improvement is being made, and together with it there has, during the past ten years, been a reduction in the rate of mortality. Improved means of excrement disposal and of drainage, and an extension of a better water service, have in several localities been carried out, and further work in the same direction is either in progress or in contemplation.

POLLUTION OF RIVERS.

An inquiry was held last week at the offices of the Bradford (near Manchester) Local Board for the purpose of taking evidence with regard to an application made by the Bradford Local Board, who asked that they might for some time longer be exempted from the operation of the third section of the Rivers Pollution Prevention Act, 1876, which deals with the discharge of sewage into streams. After hearing evidence in support of the application, Mr. Harrison, the Local Government Board Inspector who conducted the inquiry, stated that he could not honestly recommend the Local Government Board to grant any further protection in the matter on account of the injury done to persons carrying on business on the stream.

MANCHESTER DWELLINGS AND DEATH-RATE.

At a meeting of the Manchester and Salford Sanitary Association, held on the 30th ult., Dr. A. Samelson read a paper headed as above, in the course of which he discussed the statistics of the death-rate in Manchester in various ways, and pointed out the puzzling discrepancies between the figures from the imperial and from the local source. In the discussion which followed allusion was made to the enormous death-rate of children under five years of age, and the formation by the Corporation of more open spaces in the city was advocated.

ISOLATION AT WOLVERHAMPTON.

The Wolverhampton Corporation, who have hitherto used a detached building at the General Infirmary for the purposes of isolating cases of infectious diseases, have now decided to erect a proper hospital of their own. The site covers seven and a half acres of land, and from the remarks of the inspectors who held the inquiry as to the loan, there can be no doubt that the Local Government Board will sanction its acquisition for the purposes intended.

A FLOATING HOSPITAL.

It is stated that the Local Government Board are to be invited by the Admiralty to purchase the *Donegal*, screw second rate, at a forthcoming clearance of a number of worn out and useless unarmoured ships of war at Portsmouth, and convert her into a hospital. The *Donegal* was built at Devonport at a cost of £105,871, launched in September, 1858, and engined by Penns, at a cost of £50,000.

DR. J. AMBROSE has been elected coroner for the western portion of County Limerick.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5992 births and 3212 deaths were registered during the week ending the 2nd inst. The annual death-rate in these towns, which had been equal to 21·3 per 1000 in each of the two preceding weeks, declined to 19·4 last week, a lower rate than has prevailed in any previous week of this year. During the first nine weeks of the current quarter, the death-rate in these towns averaged 22·5 per 1000, against 21·1 and 21·8 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 13·1 in Brighton, 14·5 in Halifax, 15·5 in Sunderland, and 16·5 both in Nottingham and Derby. The rates ranged upwards in the other towns to 23·1 in Blackburn, 25·1 in Liverpool, 25·2 in Manchester, and 26·9 in Hull. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 361 last week, and showed a decline of 12 from the number in the previous week; they included 98 from measles, 78 from whooping-cough, 62 from scarlet fever, 52 from "fever" (principally enteric), 42 from diarrhœa, 24 from diphtheria, and 5 from small-pox. No death was referred to any of these zymotic diseases either in Birkenhead or in Huddersfield, whereas they caused the highest death-rates in Hull and in Liverpool. Whooping-cough was proportionally most fatal in Portsmouth, Hull, and Plymouth; measles in Sheffield and Liverpool; scarlet fever in Manchester, Sheffield, and Leeds; and "fever" in Bristol, Preston, and Portsmouth. The 24 deaths from diphtheria in the twenty-eight towns included 17 in London and 2 in Cardiff. Small-pox caused 2 deaths in London and one each in Liverpool, Hull, and Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which had been 77 and 73 on the two preceding Saturdays, further declined to 70 at the end of last week; 8 new cases were admitted to these hospitals during the week, against 10 in each of the two previous weeks. The Highgate Small-pox Hospital contained 5 patients on Saturday last, 2 new cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 402, 302, and 283 in the three preceding weeks, further declined to 246 last week, and were 21 below the corrected weekly average. The causes of 94, or 2·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Newcastle-upon-Tyne, and in five other smaller towns. The proportions of uncertified deaths were largest in Leicester, Salford, Bradford, Hull, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily increased from 25·0 to 28·5 per 1000 in the four preceding weeks, fell to 24·9 in the week ending the 2nd inst.; this rate, however, exceeded by no less than 5·5 the mean rate last week in the twenty-eight English towns. The rates in the Scotch towns ranged from 18·1 in Aberdeen to 27·3 in Glasgow, 28·8 in Leith, and 34·0 in Perth. The deaths in the eight towns included 114 which were referred to the principal zymotic diseases, showing a further decline from the high numbers in recent weeks; 40, however, resulted both from measles and whooping-cough. The 40 fatal cases of measles (against 67 and 41 in the two previous weeks) included 32 in Glasgow and 5 in Edinburgh. The deaths from whooping-cough, however, showed a further increase upon recent weekly numbers, 20 being returned in Glasgow, 5 in Edinburgh, 5 in Dundee, and 6 in Leith. Seven of the 10 deaths from scarlet fever occurred in Glasgow, while the 10 referred to diphtheria included 3 both in Glasgow and Edinburgh, and 2 in Greenock. The fatal cases both of diarrhœa and "fever" were considerably below the average. The 100 deaths from acute diseases of the lungs in the eight towns showed a marked decline from recent weekly numbers, and were 25 below the number in the corresponding week of last year. The causes of 90, or more than 15 per cent., of the deaths registered in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which in the four preceding weeks had declined from 34·0 to 27·5 per 1000, rose again to 31·8 in the week ending the 2nd inst. During the first nine weeks of the current quarter the death-rate in the city averaged no less than 32·9 per 1000; whereas the mean death-rate during the same period did not exceed 21·6 in London and 20·2 in Edinburgh. The 213 deaths in Dublin last week showed an increase of 29 upon those returned in the previous week, and included 9 from "fever," 8 from whooping-cough, 2 from diarrhœa, 1 from scarlet fever, 1 from diphtheria, and not one either from small-pox or measles. Thus 21 deaths resulted from these principal zymotic diseases, corresponding with the number in the previous week; they were equal to an annual rate of 3·1 per 1000, while the rate from the same diseases was 2·3 in London and 3·5 in Edinburgh. The 9 deaths referred to "fever" corresponded with the number in the previous week, and the 8 deaths from whooping-cough showed a decline of 2. The death from diphtheria was the third that has been recorded since the beginning of May. The deaths of infants showed a marked decline from recent weekly numbers, while those of elderly persons were slightly more numerous. The causes of 37, or more than 17 per cent., of the deaths registered during the week were not certified.

THE MEDICAL ACT AMENDMENT BILL.

ON the 30th ult. a meeting, described by the *Scotsman* as a meeting of the members of the medical profession, was held in the Hall of the Royal College of Physicians, Edinburgh. Dr. Balfour, President of the College, was called to the chair. He announced that he had received letters of apology from several gentlemen who were unable to be present. He had received a letter from Professor Fraser, in which he said:—

"As my colleagues and I have decided not to attend this meeting, I venture to ask you, as one whose name is attached to the invitation, to inform the meeting that our decision has not been arrived at from any want of interest in the subjects of discussion, nor from any lack of respect towards the gentlemen who have called the meeting. Since it has been called on the responsibility of gentlemen who are well known to hold opinions with which it is most probable we should be unable to agree, it does not appear to us that the interests of medical education, and of the medical profession in Scotland, would be advanced by our taking part in the discussion at this meeting of those topics to which attention will no doubt be specially given."

He had also received the following letter of apology from Professor Struthers of Aberdeen:—

SIR,—Having to leave for Aberdeen at 4 o'clock, I regret that I am unable to be present at the meeting which I see is called to consider the effect which the Medical Act Amendment Bill is likely to have "upon medical education in Scotland." Perhaps you will kindly mention to the meeting my regret, and allow me, as one who has long had to do with medical education in Scotland, to say shortly what I think the operation of the Bill is likely to be.

Medical education may, I think, be lowered in Scotland by the Bill, in so far as it may discourage university graduation; but, on the other hand, will be raised, in so far as the Bill will put a stop to the system which the corporations have, in my opinion, most unfortunately pursued of late years.

As one who worked long in the Edinburgh extra-mural school, I consider the recent outcry that extra-mural teaching is in danger to be a mistake, and that in more ways than one. That, I think, must be evident to anyone who can take a cool view of the now changed and improved circumstances of the extra-mural school compared with its position in the old days, before the teaching of the University was opened, and before the University was so prosperous and overflowing as it is now. The extra-mural teachers have now much to be thankful for compared with their predecessors of my time there, and need be in no fear of losing what they now enjoy. On the contrary, I can easily see how they may benefit by the system which will arise under the Bill.

Although there is no name attached to the advertisement, I suppose the meeting is arranged for by members of the Edinburgh corporations. May I be allowed to say that, with the warmest possible attachment to my many old friends in the Edinburgh corporations, I disapprove very strongly of the policy which the corporations have pursued of late years. What I did my best in vain to oppose in its beginnings, before I left the council of my own old and revered corporation in Edinburgh, has, I fear, been the chief cause of all this trouble coming upon Scotland.

I am, yours faithfully,

Edinburgh, May 30th, 1883. JOHN STRUTHERS.

The CHAIRMAN said they had not a single word to say against the principles of the Bill; but with regard to the provisions there were considerable differences of opinion. After describing the constitution of the Boards which the Bill proposed to establish, Dr. Balfour remarked that the treatment of the corporations amounted to a gratuitous insult.

Dr. SMITH moved the following resolution: "While approving generally of the principles of the Medical Amendment Bill, this meeting is of opinion that in the constitution of the Medical Board for Scotland the representation pro

posed to be assigned to the corporations is quite inadequate, and ought to be increased." He pointed out that as the Bill at present stood the corporations would not have their fair share of representation on the Medical Council, so that if an appeal were made from the Board to the Council it would practically be an appeal from the Board to the Board, and the complete control of medical education in Scotland would be transferred to the universities. Why this should be so seemed mysterious. It could not be in respect to the number of licences, because the corporations licensed a much greater number than the universities; or on account of the rejections, because the rejections were more numerous in the corporations than in the universities; and it could not be on account of priority of existence, because in some of the universities the medical faculties had been instituted by the corporations. The talk on the other side of the border about the low standard of qualification in Scotland could only be ascribed to jealousy.—Mr. IMLACH seconded.

Dr. BRAKENRIDGE proposed as an addition to the original motion the words, "Further, that by equality of representation or otherwise, provision be made to ensure that one of the two members of the Medical Council elected by the Medical Board for Scotland shall be a representative of the corporations."

Dr. SMITH intimated his willingness to accept the addition, but recommended the omission of the words, "by equality of representation or otherwise." Dr. Smith substituted the word "objects" for "principles" in his motion; and after a suggestion by Dr. Ireland, that they should specify the number of representatives the corporations ought to have, the motion was adopted.

Dr. HALDANE moved, "That all candidates for the final examination of the Medical Board in Scotland be required to pay a uniform fee." In supporting this resolution he referred to the correspondence on the subject in the *Scotsman*, and noticed with satisfaction Dr. Struthers' announcement, that the universities were willing that Scotland should be specially excluded from the operation of that part of the Bill to which his resolution referred.

Dr. KEILLER seconded, and the motion was carried.

Mr. DUNCAN moved, "That provision be made that at the final examination of the Medical Board no student shall be examined by his own teacher." There could be little doubt, he said, this Bill emanated from London. It might have important and praiseworthy objects in view, but it was also intended to damage Scottish medical education. His resolution was fair, just, and practical, and essential to the existence of their schools, and ought to be introduced into the Bill, and not left for after consideration.

Considerable discussion took place on this resolution, Dr. Dickson moving as an amendment the insertion of the word "exclusively" after the word "examined." This amendment was lost, and a further amendment by Dr. Craig, that no teacher should examine upon a subject which he taught under the Scottish Board, did not find a seconder. Eventually the original motion was carried, and the meeting closed with a vote of thanks to the chairman.

DEPUTATIONS TO MR. MUNDELLA.

On Friday, the 1st inst., a deputation from the Metropolitan Counties Branch of the British Medical Association waited upon Mr. Mundella at the Education Department, to suggest certain modifications in the above Bill. The deputation was introduced by Dr. Farquharson, M.P., and consisted of Dr. Bridgewater of Harrow (President), Dr. Hare (President-elect), and the two Honorary Secretaries, Dr. Henry and Dr. Grigg.

Dr. FARQUHARSON said that the deputation, though small, was exceptionally important and representative. They were gratified at the prospect of legislation for the medical profession, and hoped that this legislation might be effected, if not this session, at any rate during the present Parliament. They were also gratified that the Bill was in Mr. Mundella's hands, for they knew how ably he could steer it through the House.

Dr. BRIDGEWATER said the Branch had presented petitions containing altogether 700 signatures in favour of the Bill, which they were anxious, with certain modifications, to see passed into law. The first modification was on page 1, line 16, of the Bill, and concerned women. There was a very strong feeling against the admission of ladies.

Mr. MUNDELLA: You cannot expect us by legislation to attempt to exclude women from your profession. No Medical Bill will ever pass the House of Commons if it excluded women by Act of Parliament from becoming medical practitioners.

Dr. BRIDGEWATER: We want them to feel that they can have no position either upon our Medical Board or upon our Medical Council.

Mr. MUNDELLA: But the universities and the Royal Colleges are to elect members of the Medical Board. Are you apprehensive that they are going to elect ladies?

Dr. HARE suggested that the clause should read, "Any male person of full age."

Mr. MUNDELLA: I cannot assent to that; they cannot be placed on the Board unless they are elected. There is no exclusion in the Bill, and we cannot put it in. It would be fatal to the Bill in the House of Commons to attempt to exclude women from equal rights in the profession. At the same time you are fighting a shadow.

Dr. GRIGG said that with regard to the next point (the admission to the medical schools of female students, dealt with in Clause 18, page 10) they feared that, as the scheme of education had to be submitted to the Privy Council, the latter might make it a part of their sanction to the scheme that the schools must admit female students. At present the medical schools embraced the whole amount of education. They wanted to modify that. For instance, they wanted lying-in hospitals to be recognised as medical schools for that portion of the education.

Dr. BRIDGEWATER said there was a certain feeling that there was not a sufficient protection against quackery in Clause 27 of the Bill, and they suggested that the sub-section commencing on line 15, page 15, should read "On and after the said appointed day if any person who is not a registered medical practitioner practises, or professes to practise, or publishes his name as practising medicine or surgery for gain, or receives any payment for practising medicine or surgery, or uses the title of physician, surgeon, doctor, or apothecary, or uses any name to practise medicine, surgery, or midwifery, he shall be liable to a penalty."

Mr. MUNDELLA: That has quite a different bearing from the whole object and scope of the Bill, which has nothing to do with what either apothecaries or chemists may do over the counter. This prohibits men from assuming titles which they do not possess. On that it is extremely strict. It simply leaves the law where it is. A man could not practise unless he was put upon the Register. There is a minimum standard required by the State, and that is the examination which has been approved of by the Medical Council.

The deputation then drew attention to Clause 14, which Mr. Mundella explained referred to the final examinations.

Dr. GRIGG said the next point was that according to the Bill the Privy Council had the power of utilising the funds for the purpose of maintaining medical museums and libraries, but no power for the endowment of lectureships. They would suggest that on page 22, lines 1 to 5, "may" should be altered to "shall."

Dr. HARE then referred to Clause 44, in which practically the power of the Privy Council is given to any two members.

Mr. MUNDELLA: I think you had better not discuss that. Let the Privy Council fix their own quorum. The minimum is fixed.

Dr. HARE, speaking of medical titles, said they agreed that one who passed the final examination should be called a medical practitioner, but they thought it was not desirable that he should be called a licentiate of the Medical Council.

Mr. MUNDELLA: It was adopted in the original Bill, because we propose that the Medical Council shall be the sole licensing authority. It has come down from the Lords with the words "registered medical practitioner." I am very much obliged to you for coming here and making your suggestions. I believe that if we can only get the requisite time we shall be able to pass the Bill this session.

The deputation, having thanked Mr. Mundella, then withdrew.

A deputation of students from the Medical Union Society then waited on Mr. Mundella, to ask that when they had passed their final examination they should be allowed to call themselves medical practitioners, and that this title should be uniform. Dr. Farquharson introduced the deputation, and Mr. Wade stated their reasons for asking for the interview.

Mr. MUNDELLA, in reply, said he thought they were entitled to call themselves medical practitioners, and that

nothing could prevent them using that title. It was, however, a matter to which he must give further consideration. He would take counsel with the Lord President, and he should be very happy if in the end the Bill should come out of Parliament in a shape that would be acceptable to the Medical Union Society. What they had said should receive his best attention.

The deputation thanked Mr. Mundella and withdrew.

Another deputation then waited upon Mr. Mundella, representing the University of Cambridge. It was composed of the Rev. Dr. Phear, Prof. Liveing, Mr. Trotter, and Prof. Paget.

The Rev. Dr. PHEAR stated that their first objection was to the composition of the Medical Board for England, which would diminish the relative representation of the English Universities on that Board. Then as to the Medical Schools and the schemes with respect to the prescribed course of medical education, they thought that Clause 19 would hamper them.

Mr. MUNDELLA thought the last paragraph in that clause gave abundant elasticity. It must be remembered that they were dealing with men at the head of their profession.

Professor PAGET said that not more than three years ago the Medical Council made regulations in regard to the preliminary examination of men before they could become students of medicine, which were of such a nature that no examination of the University of Cambridge would have satisfied the conditions. They objected to such entire power as that contemplated by Clause 19 being given to a body of sixteen men.

Mr. MUNDELLA said he would take note of their apprehensions on this point, and bring them under the consideration of the Lord President. As to their regret that there should have been changes made in the Medical Board, he did not anticipate any further alteration in that direction; and he thought that there was every guarantee for an excellent Board and an excellent Council. He promised to carefully consider what they had put before him, and the deputation then withdrew.

ARMY HOSPITAL SERVICES INQUIRY COMMITTEE.

THE following is a summary of the principal recommendations of Lord Morley's Committee:—

A. *Organisation in Peace.*—Undivided control over a hospital is essential, and the control should, as at present, be vested in a medical officer. Inspection of hospitals by military officers should be regular and systematic. Hospitals should be open at all hours to inspecting officers, and closed only during certain hours to regimental officers visiting their men. The responsibility of general officers as to the medical arrangements for their troops and supervision over hospitals should be clearly understood. The power of punishing their own men for minor offences should remain with medical officers, but imprisonment should not be awarded by medical officers; and for the investigation and disposal of grave offences, whether summarily or by court-martial, non-commissioned officers and men of the Army Hospital Corps should be relegated to a military authority to be dealt with. The administration of a hospital should rest with the medical officer in charge. The responsibility of the quartermaster or steward under the medical officer to be clearly defined. Medical officers to exercise personal supervision over the hospital subordinates. The medical officer in charge should reside as near the hospital as possible, and in the larger hospitals there should be a resident surgeon. The employment of nursing sisters should be extended to all large hospitals at home and abroad, but not to hospitals with less than 100 beds. Nursing sisters to be not less than twenty-five years of age on appointment. They should act as superintendents, and not undertake the actual bedside attendance to the exclusion of the orderlies. The annual increments of their salary to be doubled, so that the maximum be attained in five years. In arranging the distribution of medical officers the convenience of the troops should be the most important consideration. The medical officers appointed to attend officers and their families should have quarters in barracks, or reside as near the barracks as possible. Officers to be entitled to medical attendance for their families without regard to position of their residence, provided their place of residence has been approved by the officer commanding the station, and he has sanctioned their receiving medical attendance there. The medical service of the household troops to be assimilated to that of the rest of the army. Opportunity of practice with war equipment during peace should be afforded both as regards field hospitals and bearer companies. The establishment of a certain number of field hospitals to be fixed, and worked as such during peace.

B. *Organisation in War.*—The evacuation principle, under which sick are constantly sent to the base, requires a check. The medical appliances with regiments to be increased by a pair of field panniers and a surgery tent. A corporal and a private of each battalion or unit to assist the medical officer, and provision to be made to train soldiers for this service. Bearer companies to be reduced to one-half the present establishment; sections to be attached to field hospitals, and, when the troops are in movement, to concentrate, and march with them. Provision to be made for mounted bearer companies. Field hospitals to be distributed by brigades and not by divisions. Their establishment to be reduced to one-half the present strength. The nursing staff to be increased to one for seven patients instead of one for eleven as at present. Equipment of field hospitals is too bulky and heavy. To be arranged so that every package shall be capable of being carried on a mule if necessary. The present transport regulations for field hospitals are satisfactory, and no change is required. Whether a field hospital should be "dieted" or "non-dieted" must be decided according to local circumstances; medical officers should be held responsible for procuring the best quality of supplies obtainable. Reliance not to be placed on a soldier bringing his rations to hospital on the day of admission. In base hospitals a separate establishment to be provided for officers. Civilian cooks may be hired to superintend cooking. Regimental depôts at the base to receive arms and equipment of men arriving at the hospital; and to give information to regiments. Medical officers to be authorised to draw and supply to patients, without payment, such necessaries as they may require; also to take care that invalids embarking are sufficiently provided with underclothing. General officers and commandants to realise their responsibility as to the proper working of the hospital system. Hospitals to be inspected and facilities afforded for officers' visits. Nursing sisters to be employed. Distribution to be made by the principal medical officer, assisted by a lady superintendent attached to the staff under the principal medical officer. Sufficient attendance to be provided on board invalid transports. In ships conveying invalids alone, the crew to assist in washing decks. When available, a proportion of men in health to be embarked with invalids. Food of sick always to be supplied according to scales of diet; when a ship is provisioned for men in health only, rations to be freely supplemented by extras and medical comforts. One or more combatant officers always to be embarked for command and duty.

C. *Army Medical Department and Army Hospital Corps.*—Examination of medical officers for promotion to be restored. To be conducted by independent examiners. Subjects to be theoretical and practical. Facilities for study in London hospitals to be afforded. Sanitary training of medical officers and Army Hospital Corps to be provided for. Conservancy body in connexion with the Quartermaster General's Department should be organised. The Army Hospital Corps to be amalgamated with the Army Medical Department, which may be constituted a Royal Corps. Uniform to be assimilated; the subordinates to have a fatigue or ward dress. The corps to be recruited from all sources except the reserves. A limited number of transfers from the line may be accepted. The character of recruits from civil life to be inquired into. Connexion with Volunteer Ambulance Corps to be encouraged. Military training to be limited to drill without arms. This, as well as ambulance and stretcher bearer drill, to be carried on at the Army Hospital Corps depôt, which should remain at Aldershot. Ward training to be carried on at hospitals where nursing sisters are employed; to last at least three months. Men at home not to be appointed to the nursing section or steward's section of the corps until they have obtained certificates both from the depôt and hospital. Schools of cookery to be established at Netley and Woolwich Hospitals. As large a number of men as possible to be trained as cooks. Guards and sentries of Army Hospital Corps men to be abolished. All fatigue duties not special to the corps to be performed by the line, or by unenlisted labourers. The organisation of

the non-commissioned officers and men to be in three sections—viz., the nursing section, the steward's section, and the general section. The privates of the nursing section to be termed first and second class orderlies; the privates of the steward's section, first and second class cooks; privates to be more highly paid in these sections than in the general section. Change of section not to be made without special sanction, except in transferring privates from the general to the nursing or steward's section, or in relegating privates to the general section for inefficiency or misconduct. Non-commissioned ranks below full corporal to be abolished. The number of quartermasters to be decreased; the warrant officers to be augmented. The scheme will admit of a large proportion of first-class orderlies and cooks, being paid at the rate of 1*s.* 10*d.* a day, without extra expense or diminution of aggregate establishment. Medical officers in charge of hospitals to stand in the same relation to their quartermasters and stewards, as regards their responsibility for the pay and equipment of the corps, as a commanding officer of a regiment does to his paymaster and quartermaster. Non-professional clerical work to be transferred to army staff clerks. Ward orderlies to be distinguished from all other men of the corps by a special badge. Privates to be liable to punishment by medical officers as follows:—1st and 2nd class orderlies and cooks to be exempted from minor punishments other than reduction to 2nd class and transfer to the general section respectively. Privates of the general section to be liable to punishments according to the Queen's regulations, except imprisonment. If more severe punishment is required, the offender to be sent to a regiment for punishment. For slackness men to be liable to be attached to a regiment for instruction. In all cases of suspension from hospital duties, men should forfeit their departmental pay. Men who frequently misconduct themselves to be discharged. A considerable percentage of selected orderlies and cooks should be permitted to extend their service and re-engage. The reserves should be compensated by passing some men to the reserve after three years' service. The reserves may be strengthened by forming a volunteer reserve in volunteer ambulance corps, on the plan of the Army Post Office Corps. Also, soldiers who have been trained regimentally as bearers should be noted when they pass to the reserve. Marching past at general parades in review order, as at present frequently practised, should be discontinued. Detachments of the corps should be exercised as field hospitals with transport and equipment as on service. Voluntary aid in war to be taken into consideration, and a system organised for its proper utilisation.

ROYAL COLLEGE OF SURGEONS, IRELAND.

AT a meeting of the Council, held on the 2nd inst., Dr. A. W. Foot, of the Meath Hospital and Ledwich School of Medicine, was duly elected to the chair of Medicine, vacant by the resignation of Dr. James Little.

On the same day a meeting of the Fellows took place to discuss the annual report of the Council. Mr. W. T. Stoker moved a resolution to the effect that the present method of electing examiners and professors requires to be changed, and that the Council be recommended to make such alterations in the charter as may be necessary, so as to elect them by a majority of two-thirds at least of the entire Council, including the president and vice-president. The present method of electing examiners and professors—viz., by balloting for the first seven names out of a list of twenty-one members of Council—he thought open to grave objections, and had given rise to a widespread feeling of dissatisfaction. The resolution was seconded by Mr. Whistler, and supported by Professor Mapother, who pointed out that all other offices in the College were filled by a majority of the entire Council, and by Dr. Jacob, who remarked that the present rule of electing examiners prevented many candidates from offering themselves for election on the chance nature of the arrangement. Dr. Kidd wished that a clause should be added, that each elector should vote openly, which suggestion was supported by Dr. Martin. An amendment was moved, that notice of motion should be given, and that each elector should receive due notice of same; but the President ruled that as the resolution had arisen out of the report of the Council, it was quite regular without any notice of motion. Mr. W. T. Stoker modified his resolution by adding the clause proposed by Dr. Kidd—viz., "all such elections to be by open voting." The resolution as altered was passed by a large majority. It is understood that the Government will not introduce a clause to this effect into the Medical Bill now before Parliament, but will be willing to grant an alteration of charter to the same effect if desired.

The question of night lectures next came under discussion, and Dr. Jacob made a statement in reference to the matter, and moved a resolution, which was seconded by Dr. Martin of Portlaw, that the Council be directed by the College that the system of night lectures be not permitted. Dr. McDonnell thought that the College should not specify the hours at which lectures should be attended, but that the examinations should be improved and made thoroughly searching, so as to pass out good men; but there should be a *bonâ fide* attendance of students, whether at day or at night. Dr. Mason and others connected with the Ledwich School of Medicine, the school at which night lectures are delivered, defended their institution from the attack made upon it, and considered it a most harsh and injudicious proceding on the part of the College not to recognise these lectures. Dr. Kidd believed that the first business of the College was to see that the candidates were thoroughly informed; and he thought that hospital surgeons and those belonging to the schools should amicably join in securing *bonâ fide* attendance on lectures and at hospital. After much discussion Dr. Kidd proposed an amendment to the effect that the incoming Council be requested to send a copy of the arrangements for the attendance of students to every lecturer and hospital teacher recognised by the College, to aid in the filling up of the necessary certificates instead of expressing any definite order of the College in reference to night lectures. This amendment was put, when fifteen voted against it and thirty-two in favour of it, when it was put as a substantive resolution and carried by the same voting.

Several notices of motion having been lodged, the meeting was adjourned until last Monday, the 4th inst., when Mr. Thomson proposed that after June, 1887 the office of president may be filled for more than one year. This was seconded by Mr. Corley; but Mr. Macnamara showed that by the present charter the resolution proposed could be carried out without any alteration being made. It was, however, carried by two votes. Dr. Kidd next made some observations on the Medical Act Amendment Bill, and proposed that the incoming Council be recommended to have the Bill further amended so as to exert a closer supervision over medical education than at present contemplated. He moved that all previous examinations should be conducted by the medical authorities; that the Board examination should be accepted by each of the medical authorities for the final examination; and that candidates who had passed the previous and final examination by the Board should receive their qualifying diplomas of such body, and be registered in right thereof. This was seconded by Dr. Darby, of Bray, and adopted. Mr. Brunker next proposed that steps should be taken to make such alteration in the charter of the College as will allow provincial and other Fellows to vote for the election of president, vice-president, and council by voting papers or by other means, as is the case in Trinity College and other institutions. Dr. Jacob opposed the resolution, which was, however, almost unanimously adopted. Mr. Chaplin then proposed that all notices of motion brought before the Council or the College which might make an alteration in the charter or any important bye-law of the College, should require notice of such change by advertisements in two medical journals circulating in Ireland, and that no action should be taken until two weeks after such publication, unless it seemed otherwise fit to two-thirds of the existing Council present and voting. Dr. Kidd objected to the resolution, and proposed an amendment to the effect that the Council be requested to take into consideration the best method for informing the fellows as to the result of the proceedings of Council. This was seconded, carried, and passed as a resolution.

Immediately afterwards the examination of the voting papers for the election of president, vice-president, secretary, and Council for the ensuing year took place. Mr. W. J. Wheeler was elected president, and the vice-presidency, which he vacated, was filled by the selection of Mr. E. H. Bennett, surgeon to Sir Patrick Dun's Hospital, and lecturer on surgery in the Medical School of Trinity College. Mr. Colles was re-elected secretary without opposition. For the Council thirty candidates competed for nineteen places, with a result that the outgoing members were all re-elected

with the exception of Mr. Elliott, who was replaced by Dr. Cameron. This was the first occasion on which Dr. Cameron competed for a seat on the Council, and his success must be regarded as almost unprecedented. Out of a constituency of 351,118 Fellows voted.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Surgeon Cuthbert Collingwood Fitzsimon, M.D., has resigned his commission.

ARTILLERY VOLUNTEERS. — The Tynemouth: Surgeon John George Tindle resigns his commission; Acting Surgeon Frank Rennie, M.B., to be Surgeon.

RIFLE VOLUNTEERS. — 1st (City of Bristol) Volunteer Battalion, the Gloucestershire Regiment: Acting Surgeon Francis Richardson Cross resigns his appointment. — 3rd Surrey: Honorary Assistant-Surgeon William Everard Cressy resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Corps on his retirement.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Inspector-General of Hospitals and Fleets David Lloyd Morgan, C.B., M.D., has been placed on the Retired List of his rank from the 30th ultimo.

The following appointments have been made:—Surgeon George W. Frederick Armstrong, to the *Duncan;* Surgeon John Smythe Logan, to the *Triton* (for temporary service); Surgeon Henry W. Duffield Walsh, to the *Indus*, vice Armstrong; Surgeon Thomas Nunan, to the *Repulse*, vice Walsh; Allen E. Douglas, M.D., to be Surgeon and Agent at Carlingford, vice Carroll.

Correspondence.

"Audi alteram partem."

THE EDINBURGH SYSTEM OF NOTIFICATION.

To the Editor of THE LANCET.

SIR,—To judge of the success or otherwise of a given project, it is necessary to know the purpose intended to be achieved by it. To most people the standard of success of any compulsory notification scheme would, I imagine, be the diminution of mortality caused by it, and by it alone, in the district to which it was applied. If such diminution did not follow; or, if following, it were not greater than in other similar districts not possessed of a compulsory notification law, or if other agencies were in operation in addition to such a law, the success would be doubted. Dr. Littlejohn's standard seems to be the number of cases reported, and the fact that there is but little friction between the sanitary authority and the medical profession.

The following death-rates for Edinburgh were published in the *Scotsman* of January 2nd, 1882:—In 1876 the rate was 19·51; in 1877, 20·86; in 1878, 21·53; in 1879, 19·06; in 1880, 21·03; in 1881, 20·06. The accuracy of these figures has never been called in question, yet they show a mortality of 20·24 per 1000 for four years before, and one of 20·55 for two years after, the passing of the Edinburgh Act. Dr. Littlejohn's letter, published in your issue for May 28th, does not give the death-rate for 1882, and I have no means at hand of knowing what it is, but it shows that during the third year of the full operation of an Act for limiting the spread of six infectious or contagious diseases five of those diseases had attained dimensions considerably greater than had been attained by them in either of the two previous years. They show, moreover, a very considerable diminution in the proportion of removals to hospital during 1882 as compared with 1881. If the ratio had been maintained, there should have been 872 in the latter year instead of 539, the actual number. To an outsider this fact certainly does not seem to show, as Dr. Littlejohn says it does, "how increasingly popular the Act is with the general public."

As to its popularity with the bulk of the medical practitioners, in the words of Mr. Hamilton of this city, probably the reason is not far to seek. Any medical man signing a certificate with the words appended to it, "No immediate attention required," and getting 2*s.* 6*d.* for such certificate, does not object to having the opportunity of sending in any amount of them. Human nature would be different in members of the medical profession from what it is in the rest of mankind if they did. Perfect freedom of action, no interference, in fact no action without a further request, and a steady addition to their income through signing these certificates, are what few men would object to. The medical men, then, do not object, and this fact is specially mentioned by Dr. Littlejohn as proving the Act to be a success. Most men will require better proof than this. The duty of the ordinary police is not merely to detect crime, but to prevent it, and if, instead of diminishing in number, cases of crime went on largely increasing year by year, our police system would not be considered by any outside itself a decided success.

The silence of the daily and medical press, to which also Dr. Littlejohn points as proof of success, simply depends on the scheme of notification having been so contrived as to leave the medical practitioner absolutely free from interference unless he requests it and to the large exercise of a discretion which, to quote Dr. Littlejohn's own words, "is so used as to prevent him from coming into collision with a lot of doctors." The loud outcry that was raised in both the lay and medical press over the only case of collision that has occurred in Edinburgh proved this, and proves also how dangerous to the continuance of the Act any number of such collisions would probably be.—Yours faithfully,

Liverpool, June 4th, 1883. WILLIAM CARTER.

THE INDIGO-CARMINE TEST PAPERS.

To the Editor of THE LANCET.

SIR,—I observe in your leaders of May 19th and of to-day a statement to the effect that indigo-carmine is reduced by all carbohydrates, and is, therefore, unreliable as a glucose test. I have already recorded in your pages (see THE LANCET, May 26th) the fact that out of nine such bodies (exclusive of glucose) only two reduced this test as well as Fehling's solution, while seven had no effect on either test.

This note gives me the opportunity of mentioning that I have now isolated inosite, creatine, and creatinine for experimental purposes. The last two substances had no effect on the indigo-carmine test, or on Fehling's solution, but reduced the alkaline picric solution, and inosite reacted with the indigo-carmine and the picric tests, and turned Fehling's solution to a permanently clear olive-green colour.[1] This colour is exactly like that which I, and no doubt others, have repeatedly obtained on heating certain urines with the cupric solution in nearly equal proportions. Under these circumstances the merest trace of glucose will produce a similar colour; but then it always becomes muddy or milky, often during the act of boiling, but if not then as it cools. My experiments on this point bear out what Dr. Wm. Roberts asserts respecting the detection of less than a half per cent. of sugar by the copper test. He says, as the liquid cools "first the mixture loses its transparency, and passes from a clear olive-green to a light-greenish opacity, looking just as if some drops of milk had fallen into the tube. This green milky appearance is quite characteristic of sugar" (urinary and renal diseases). But the reaction with inosite is not cloudy, it is merely a transparent olive-green. This matter will require a good deal of observation before it can be made available as positive knowledge for clinical purposes, and at present I can only hint at the probability; but so far as I have gone, I am persuaded that Fehling will become an important differentiating agent between glucose and inosite, and that the latter substance is frequently to be met with in the urine. The position provided by my experiments and clinical observations is this: all the saccharoid constituents of the urine reduce both picric acid and the indigo-carmine tests; so that after using either we must fall back on Fehling for differentiation, just as we must appeal to boiling when we wish to distinguish sero- from the other modifications of albumen. My numerous experiments have taught me so far there are no other ingredients of normal or abnormal urines than the saccharine that will produce the characteristic reaction with the indigo-carmine test papers.—Your obedient servant,

Harrogate, June 2nd, 1883. GEORGE OLIVER.

[1] Professor Arthur Gamgee mentions this reaction. See his Text-book of the Physiological Chemistry of the Animal Body, vol. i., p. 338

"THE REAL LORD BYRON."

To the Editor of THE LANCET.

SIR,—Can you inform me on what authority Mr. Cordy Jeaffreson, in his late work "The Real Lord Byron," vol. i., page 35, states: "There exists conclusive evidence that the birth took place in London, and that Mrs. Byron was attended at her accouchement by the famous surgeon, John Hunter, &c."? This was in January, 1788, only five years before Hunter's death. I do not recollect ever seeing it recorded that at that period he practised midwifery.

I am, Sir, your obedient servant,

Savile-row, May 29th, 1883. CHARLES HAWKINS.

Having referred the above letter to Mr. Cordy Jeaffreson, we received the following reply:—

24, Carlton-road, Maida Vale, N.W.

As I am not in a position to publish the *ipsissima verba* of the authorities, or even to declare in general terms the sources of information that enabled me to produce my book about Byron, Mr. Charles Hawkins must, in his kindness, be content, at least for a few months, with my assurance that John Hunter attended at Mrs. Byron's accouchement in 1788. The famous surgeon may have been called to the accouchement so as to be at hand to give advice and practical help in the case of emergencies arising outside the obstetrician's peculiar province. He may also have been the actual accoucheur. In either case the evidence is conclusive that he was summoned to the accouchement, that he attended the accouchement, that he saw the infant at the moment of birth, and that he gave the young mother instructions respecting the malformation of the right foot both before and after her return from London to Scotland.

June 4th, 1883. JOHN CORDY JEAFFRESON.

USE OF HYPOPHOSPHITES IN THE DISEASES OF CHILDREN.

To the Editor of THE LANCET.

SIR,—The administration of the syrup of the ferruginous and alkaline phosphates has become so general of late years in most cases of anæmia and debility occurring among children, that it appears to me a matter of no small importance that any phase of disease in which experience shows it to be injurious should be brought to the notice of the profession. The class of cases I allude to, and in which I believe this valuable medicine should either be withheld or used with great discrimination, will be found to occur in those children who, from the age of four to six or seven, display signs of great mental activity and excitement, amounting occasionally to meningeal and cerebral hyperæmia, with a history perhaps of an hereditary tendency to scrofulous or tubercular disease. In these cases I have sometimes found good results follow the simple withdrawal of the phosphites, which would appear to have been stimulating inordinately the pliant little brain so much in need of repose. Hence quietude and relaxation from all mental strain are of the first importance, and in case a change of air is rendered necessary the utmost circumspection is required. The sea air, and that at first not too bracing, is in my experience the best, while the air of hills should especially be avoided. So much is this so, that I have found Hampstead-heath so injurious and exciting after a fortnight's sojourn that a prompt removal was alone effectual in removing the dangerously threatening symptoms, and preventing their return.

I am, Sir, yours obediently,

Welbeck-street, May 28th, 1883. D. H. CULLIMORE, M.D.

"THE ANASTOMOSIS OF THE CORONARY ARTERIES."

To the Editor of THE LANCET.

SIR,—The question of the anastomosis of the coronary arteries has been so often debated with variable results that, as Dr. West says in his very interesting communication, the text-books show a want of uniformity, which, indeed, they could hardly help unless they had all followed one authority. Ellis's "Demonstrations," eighth edition, says they descend toward the apex, but says nothing about their joining. Gray, fifth edition, says they do. Beatie, "Practical Analysis," says they anastomose freely; and Quain and Sharpey, on the authority of Hyrtl, one of the most successful injectors, says or said they do not. Some years ago, when junior demonstrator of anatomy at the Middlesex Hospital, I made some injections of the coronary arteries at the suggestion of Mr. Morris, and found that in some cases they anastomosed, and in others they did not, the latter being as two to one. I can only find actual notes of two cases, both children, one successful, the injection going in, at the left and coming out at the right artery; the other unsuccessful, and where, on injecting both arteries, it was shown that no anastomosis existed. There is no record of the time after death when the experiments were made, and probably, as Dr. West points out, this may have something to do with it. His remarkable success will, of course, reopen the matter, and be the cause of fresh experiment, but the conclusion will probably remain as before, that in some cases the anastomosis is very free, in some slight, and in others does not occur at all.—Yours obediently,

Holland-road, W., June, 1883. GEORGE C. KAROP.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

SANITARY CONDITION OF NEWCASTLE.

OUR medical officer of health, Mr. H. E. Armstrong, has just issued his report for 1882. The volume possesses much to interest a general as well as a local reader, and it will no doubt be noticed by you under its proper heading. I may, however, say that it is creditable to our sanitary authorities and all who have been engaged in its preparation, which has evidently been a work of no small labour. It is supplemented by a series of valuable statistical tables, maps, and plans, some of the illustrations showing very clearly defects which were found in dwellings in our city and how the sanitary shortcomings were remedied.

NORTH OF ENGLAND MICROSCOPICAL SOCIETY.

This Society, which includes many of our *confrères* in its list of members, and does much good to them and all others connected with it by its field meetings, had its first out-door gathering for the summer recess last week at Whitehill Hall, the seat of Colonel Fife Cookson. This mansion is situated near Chester-le-street, which ancient and historic little town is coming into notice just now as a health resort. There was a good attendance of members and lady visitors, the weather being charming. Mr. Mason Watson, the agent of the estate, and who is also president of the Society for the present year, was most assiduous in his attention to his guests on the part of the worthy proprietor; and so upon the whole the first meeting of the Society for this out-door season is likely to be long remembered by all who had the good fortune to be present.

NEW SANITARY HOSPITAL FOR NEWCASTLE.

The Sanitary Committee of our Corporation has invited architects to compete for the construction of a new hospital for infectious diseases, to be erected at Heaton, at the east end of Newcastle, and will probably be commenced this summer. The hospital will be on a large scale, on the separate block system. As regards the wards for patients, there are to be six, each to accommodate fourteen patients; the general ward is to be twenty-six feet in width, the cubic capacity of all wards to be at the rate of not less than 2000 cubic feet per bed. The lighting, warming, and ventilation are to be carefully and specially provided for, so that we may look forward to this building, I hope, as being the exponent of the sanitary science of the day as regards the important matter of hospital construction.

SMALL-POX AT WALLSEND.

Small-pox is epidemic at Wallsend, and considerable commotion prevails amongst the inhabitants in consequence of a patient in a state of delirium having escaped from his nurse and ran about the streets of the place. Complaints are stated in the papers as to want of precautions being taken by the Local Government Board and the School Board, and it is alleged that the schools are foci of infection; at all events, one of the teachers is down with the disease.

THE GOYDER MEMORIAL FUND.

A meeting of the executive committee of this fund was held the other day, when it was announced that the sum available for investment for the foundation of the prize would be about £325. All things considered, the promoters and workers for this object have done well. The meeting decided upon rules to be submitted to the approval at a general meeting of the subscribers shortly to be held. It is to be hoped that some steps may be taken at this meeting, if not before, to rescind or modify the fourth rule, which states: "That no student be eligible for the examination unless he be a perpetual student of both the College of Medicine and the Infirmary, Newcastle-on-Tyne." Seeing that it is a clinical prize, it is not easy to see why, in the interests of medical science or surgical art, this hard-and-fast line should be drawn as regards perpetual studentships at the Newcastle School. The object should naturally be the award and encouragement of diligent surgical students at the Newcastle Infirmary, with which Mr. Goyder was so long and intimately connected. Unless I mistake, Mr. Goyder himself could not have been a competitor for these prizes under these stringent conditions. The members themselves of the medical board of the infirmary, with whom it is proposed to entrust the examination, could not all claim to have been perpetual students there. Besides, a healthy rivalry would do good, and Newcastle students would not fear the entry into the competition of others from a distance. The rule is not conceived in a broad and liberal spirit at all worthy of "canny Newcassel."

Newcastle-on-Tyne, June 6th, 1883.

SCOTTISH NOTES.

(From our own Correspondent.)

LABOURERS' COTTAGES IN SCOTLAND.

IT is worthy of being announced that a meeting of farmers have resolved to ask Government to insert a clause in the Agricultural Holdings Bill for the provision of better accommodation for their workmen. In some parts of the country much has been done in this direction; but throughout a large area farm cottages are a disgrace to civilisation; and the first indication of a conscience on the subject is heartily to be welcomed.

RIVER POLLUTION.

The new Police Bill threatens those who, either as manufacturers or municipal authorities, are guilty of river pollution, and as a consequence the Lord Advocate has had to defend his proposals before the first of perhaps many deputations anxious for the old order of things. His lordship was able without material change to satisfy the manufacturers; but, judging from the ejaculations of the Lord Provost of Perth, he will find it more difficult to show the authorities there that it is not in accord with the spirit of the times to allow the citizens to be supplied with dilute sewage as drinking water.

COURT FEES TO MEDICAL MEN.

A decision given last week by the Sheriff of Midlothian ought to be known to the profession in Scotland. It appears that an action for damages had been raised against the Edinburgh Tramway Company by a boy named Fraser, resident in Leith, and that on the first trial damages were obtained, but on appeal decree was given for the company. Dr. Thomson, of the Leith Infirmary, was employed by Mr. Duncan, S.S.C., who refused to pay the medical fee of four guineas for two days' attendance at court. The action now decided was at the instance of Dr. Thomson, and the lawyer has been found liable. It is not unusual for a lawyer to employ a medical man in this way and afterwards disclaim all responsibility; and, especially in criminal cases, it is desirable to have either payment or distinct guarantee of such before entering the witness-box. A few years ago I was successful in reducing a charge of murder to one of culpable homicide; the advocate for the defence had a retainer of fifteen guineas and his fees, the solicitors had the whole case in hand, and for three days' attendance I was offered two guineas and a half. The lesson was not lost, but Dr. Thomson has taken a better course, and I congratulate him on the result.

THE MEDICAL BILL.

It is hard to follow, and it would require too much space to record, all the efforts and arguments now being put forth on the part of the corporations and extra-mural teachers for increased representation on the Scottish Medical Board. The money power of the corporations need no longer be doubted. In this part of the country the students alone seem to take a broad view of the Bill, and they distinctly claim some title of recognition after taking a compulsory examination. They care little for the wrangling of money-grubbing corporations, and have evidently been unable to ascertain what these bodies have done for their present licentiates. They further claim that all candidates should pay a similar fee, apparently unaware of the fact that the museums, &c., of the corporations alone will be supported by the funds of the Medical Board. The universities will provide in their own way for these, but it might be well to make this more clear in the Bill. One conspicuous fact stands out in all the discussions concerning the representation question—viz., that it is extra-mural teaching which needs protection. Nobody but the wire-pullers care for corporation interests, and if a change is to be made in the Medical Board, it is the teachers who have the right to a voice. An addition of this kind for Edinburgh and Glasgow would raise the extra-mural element to five, and assuredly higher than this they should not come. It must be remembered that St. Andrews interests are not in accord with those of the teaching universities, and in reality their representative should be considered as likely to vote with the corporations. This is a most material point, and should be known by Mr. Mundella. The teaching universities have now but seven votes, as against four, and if the corporations get their own way in having four additional representatives, they could command an actual majority in the board. It is found convenient for deputations to London to omit this view of the case. Let me analyse the constitution of the Scottish Medical Board thus:—Universities (teaching) as medical schools, 4; universities (teaching) as examining bodies, 3; other examining bodies in Scotland, 4. The number of students in the universities is 2700; the number of students in extra-mural schools is 900. If, then, the corporations have three or four additional representatives, bodies dealing legitimately with 900 students will have equal weight with those giving a more complete training to three times the number. This evil would not be so conspicuous were the extra-mural teachers, the real workers, allowed two delegates. But perhaps the 500 Fellows who have bought their parchments deem themselves worthy of Government consideration!

ERRATUM.—In the announcement in the Scottish Notes of last week of the candidates for the chair of Medical Jurisprudence at Aberdeen, the name of the assistant to the Professor of Materia Medica was misprinted "Haig" instead of Hay.

PARIS.

(From our Paris Correspondent.)

JUST before his death, which took place about six weeks ago, Dr. Krishaber was awarded the prize Montyon of 2500 francs by the Academy of Sciences, which he shared with Dr. Dieulafoy for their conjoint work on the inoculability of tuberculosis. This they have sufficiently demonstrated by a series of experiments upon monkeys, of which Dr. Krishaber had a large collection. Of fourteen monkeys that were inoculated twelve died tuberculous in from thirty-four to 218 days, in spite of the favourable hygienic conditions in which they were placed. The contagiousness, or rather the infectious nature, of the affection in the form of pulmonary phthisis was not the less proved, as may be seen by the following examples:—A small dog-faced monkey, which had been living at liberty in the house of one of the experimenters, was put into the menagerie among other monkeys which had been inoculated. One of the old inmates got attached to the newcomer, which was constantly between its arms, and both died at an interval of nine days of each other, the internal organs having been found to be attacked by tuberculosis. Subsequently the menagerie in which the experiments were performed was cleaned out and thoroughly disinfected. Twenty-seven monkeys were then put into it, and since that time—that is, during fifteen months—there was not a single death from tuberculosis. These experiments were considered sufficient

to prove that pulmonary phthisis was transmissible by inoculation and by cohabitation.

Dr. Villemin, principal physician and professor of clinical medicine at Val-de-Grâce, has generally been considered the real discoverer of the inoculability and contagiousness of tuberculosis, which he proved experimentally nearly twenty years ago. It appears, however, that the Germans have since published several works on the same subject, which, with slight modifications, are the exact reproduction of Dr. Villemin's memoir, published in 1865, but without any acknowledgment of the original source. Such an act of piracy could not be tolerated by the French, and a large number of professors and other medical men of the Faculty got up a banquet, with the view of publicly expressing their indignation, and rendering justice to Dr. Villemin.

Dr. Lunier, Inspector General of Lunatic Asylums throughout the French territory, having reached the limit of age for official service, has been placed on the retired list, but he has been amply compensated by his election as member of the Academy of Medicine, in the section of hygiene and legal medicine. The age limit for hospital surgeons is sixty-five, and for physicians sixty-six, but the age for clinical professors and the other professors of the Faculty is only limited by natural infirmities or by death, on what grounds, or by what mode of reasoning, I shall not attempt to explain, but rumour has it, that as the professors framed the rule they did not forget their own interests. The difference of age between hospital surgeons and hospital physicians will also have struck you, and is to me equally inexplicable.

Dr. Lunier has long been renowned as an apostle of temperance, and is the founder of the Temperance Society in this country. At a recent meeting of the Société de Statistique, Dr. Lunier delivered a very interesting address on alcohol and alcoholism, from which it may be gathered that wine in moderation is an excellent thing, and so are beer and cider; but wines, particularly claret, take the lead, provided they are pure. These three liquors have become necessities of a civilised life, and if taken in strict moderation are conducive to health; but the same cannot be said of spirituous liquors, which should not be taken in any quantity as an ordinary or every day drink. He highly approved of the efforts of teetotalers, but he thought that it would be difficult for the principles of teetotalism to have a footing in France or in any other wine-growing country. Moreover, he observed that in the regions where wine alone is drunk alcoholism is unknown. Dr. Lunier concluded his address by remarking that the abuse of alcoholic drinks is the direct cause of a great number of diseases which are generally fatal, and they have the effect of aggravating those already existing in the economy. He enjoins the propagation of special knowledge of the evil consequences of the ever-increasing consumption of alcoholic liquors, among the most terrible of which are insanity and death.

Dr. Jacques Bertillon has succeeded his father as chief of the Statistical Department, for which post he would be considered eminently qualified, as for some time before his father's death it was he who did the work.

Paris, June 5th, 1883.

Obituary.

JAMES FITZJAMES FRASER WEST, F.R.C.S.

WE record with much regret the death of Mr. James Fitzjames Fraser West, which took place on May 24th at his residence at Edgbaston, Birmingham. Mr. West was born in London, and he was not quite fifty years of age when he died. He was educated at St. Thomas's Hospital, where he was dresser to the late Mr. South, and where he distinguished himself in anatomy, taking high honours in that subject at the University of London. He qualified for practice as M.R.C.S. and L.S.A. in 1854, and he was admitted by examination to the Fellowship of the Royal College of Surgeons in 1867. Upon taking his diplomas he was appointed to the house-surgeoncy of the Queen's Hospital, Birmingham. He held this office until his election as one of the honorary surgeons of the institution in 1857. This latter appointment he held until his death—namely, for a period of twenty-six years, being for the last few years of his life the senior surgeon of the hospital. Mr. West was also consulting surgeon to the Birmingham Dental Hospital, Vice-President of the Birmingham Medical Institute, a Director of the local Medical Benevolent Society, and he had been a President of the Midland Medical Society.

Mr. West was a frequent contributor to our pages and to the literature of practical surgery. Amongst his papers may be mentioned the following:—"On Wounds of the Heart;" "Contributions to the Surgical History of Syphilis;" "On Excision of the Wrist-Joint." He also published a translation of Baron Langenbeck's work on "Gunshot Wounds of the Hip." He was fond of dramatic criticism, and he recently published a very interesting essay, which he read as president of the Birmingham Shakespeare Club, entitled "Shakespeare from a Surgeon's Point of View."

As a clinical teacher and hospital surgeon Mr. West was painstaking, sound, and practical. His practice was founded on the traditional lines of the older school of surgery. His kindliness of heart and manliness of character won him many friends, to whom he loved to offer a generous hospitality. He was deservedly popular with his pupils. For many years he was in the habit of making periodical continental journeys to visit the medical schools and hospitals of the great capitals; he used to bring back from these excursions copious notes, which he freely communicated to his clinical class and to the medical societies. From his earliest days he was a diligent student of his profession, and he left behind him such a reputation at his school in London, that at a later period of his life it seemed probable that he would be chosen as one of the honorary staff of the new St. Thomas's Hospital.

Mr. West was in failing health for some months before his death. Rest from work and a trip to Italy early in the present year gave a brief hope of improvement. He was confined to his house for the last few weeks of his life by a severe attack of acute rheumatism, which was complicated by old cardiac lesions, pulmonary embarrassment, and renal failure. General dropsy and œdema of the lungs appeared during the last few days of his illness, and he passed quietly away, fully conscious of his approaching change. He was attended with devoted care by his old partner in private practice, Mr. W. S. Mann, and by his hospital colleagues, Dr. Sawyer and Mr. Jordan Lloyd, with whom Sir William Jenner visited him in consultation.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons, on Thursday, 31st ult., petitions for alteration of the Medical Bill were presented from Edinburgh and Rochdale, and against repeal of the Contagious Diseases Acts from Havant and Portsea. During the discussion of the Local Government Board vote in Committee of Supply, inquiries as to the supply of lymph from the National Vaccine Establishment were made by Mr. Labouchere and Mr. Cropper, to whom Sir C. Dilke and Mr. Hibbert respectively replied that either calf lymph or humanised lymph could be obtained, and that all applications for supplies were dealt with in the order in which they arrived. In answer to Dr. Cameron, Sir C. Dilke said the Local Government Board had nothing to do with extending to Scotland the grants in aid of public vaccination, and he had some doubt as to the wisdom of such grants in England. He should give the subject his careful consideration.

On Friday, a petition was presented from the Scotch Royal Burghs in favour of the abolition of the Scotch Board of Lunacy. Petitions in favour of the Medical Bill were presented from Marylebone and Finsbury, and against the repeal of the Contagious Diseases Acts from Dover and Gravesend.

On Monday, further petitions were presented against the repeal of the Contagious Diseases Acts from Folkestone (3), Elham, and Farnham; in favour of the Infectious Diseases Notification Bill from Wandsworth; and for alteration of the Medical Bill from Arklow. The second reading of the Medical Bill was further deferred for a week.

On Tuesday, petitions were presented in favour of the Infectious Diseases Notification Bill from St. Giles's; for alteration of the Medical Bill from the Chemists' Association and from Glasgow, and in favour of the Bill from Hackney.

Sir C. Dilke, replying to a question by Mr. P. A. Taylor, referring to the repeated conviction of a Mr. Neale for the non-vaccination of his children, said the Local Government Board were considering whether they would send to the Bristol Guardians a circular similar to that sent in 1875 to the Evesham Guardians in deprecation of these repeated prosecutions of the same person.

St. Pancras Workhouse.

Mr. Hopwood has given notice of the following questions for Monday:—To ask the President of the Local Government Board if his attention has been called to the proceedings at an inquest respecting the death of Herbert Walsh, vaccinated in St. Pancras Workhouse by the public vaccinator, in which a medical witness attributed the death of the child to the cessation of mother's milk caused by the mother having been revaccinated without her consent being asked the day after the child's birth; to the statement of the public vaccinator that in revaccinating mothers a few hours after their confinement he was acting under the advice and with the knowledge of the Local Government Board; whether the child was vaccinated when only eight days old; whether the Local Government Board approve of the revaccination of a woman, with or without her consent, so early after her confinement while nursing her infant, or of the vaccination of an infant so young; and whether the Board will issue directions to restrain a practice attended with such results.

The Indian Medical Service.

Mr. Leamy asked the Under-Secretary of State for India whether, in view of the exceptionally large number of junior medical officers in India who were drawing unemployed pay, it was the intention of the India Office to throw open five additional appointments to competition in August next.—Mr. Cross replied that, notwithstanding the present exceptional state of affairs, it had been decided not to put an entire stop to admissions to the service, for two reasons—1st, to ensure hereafter an equable succession of officers to the higher posts; and, 2nd, not to inflict hardship on the large number of students who had been reading with this service in view. The number of appointments had been reduced this year to the lowest point compatible with these objects—viz., ten; whereas the average number for the past five years had been thirty-three.

On Wednesday, the Deaf and Dumb Poor Asylum Bill, which came down from the House of Lords, was read a second time. A petition was presented from Cork for alteration of the Medical Bill. The second reading of the Infectious Diseases Notification Bill was further deferred to the 27th instant. Mr. Gibson gave notice that on Monday he will ask the Secretary of State for War whether, having regard to the grave charges and insinuations first brought in evidence and in the press against medical officers in the late Egyptian war, he will take care that the vote in the Army Estimates relating to the Medical Service of the Army (Vote 4) is taken at a time when those interested in vindicating the conduct of those officers will have ample opportunities of doing so. Mr. Torrens will on the same day question the President of the Local Government Board as to the renewal of litigation *re* the Hampstead Small-pox Hospital.

Vaccination and Syphilis.

On Thursday, Sir L. Playfair asked the President of the Local Government Board whether one of the Board's officers, in the course of an investigation into the conditions under which syphilis could be transmitted in the act of vaccination, had infected himself with syphilis, and had seriously injured his health; and whether, if that be true, the conditions under which he succeeded in infecting himself were such as might occur during legitimate operations of vaccination.—Sir C. Dilke said the facts were substantially those set forth in the first part of the question. The officer referred to, believing that syphilis, although it had very rarely indeed been communicated in the operations of vaccination, might under some circumstances be so communicated, was desirous of learning the conditions under which such transmission was possible. His object was to obtain better information than was contained in the rare and accidental cases which had hitherto been reported, and to learn the precautions proper to be taken for avoiding the risk of such occurrences during vaccination. This investigation required that experiments should be made on the human body, and these, although he was acting as an officer of the Board, he proceeded to make on himself. At the end of the experiments, he regretted to say the officer did contaminate himself with syphilis. The matter was the subject of a full inquiry, but a complete reply could not be given until a report was received. In his experiments, the officer made no departure from the instructions given to public vaccinators, and recognised practically in all vaccinations. It was impossible for him to conclude his reply without expressing his very deep sense of the devotion of this officer to the cause of science, and his regret for the personal suffering he had endured in the interests of truth.—Mr. Hopwood asked whether it had not been long known and admitted by the medical profession that syphilis could be inoculated by vaccination.—Sir C. Dilke said in special, rare, and accidental cases it might.—Mr. P. A. Taylor asked whether the right hon. gentleman was not aware of the fact, attested by the highest medical authority, that it was quite impossible under all circumstances to detect the syphilitic taint which might exist in the child from whom the lymph was taken.—Sir C. Dilke: No, sir; the scientific report which is being prepared will, I think, show that the circumstances are such as must be brought to the notice of the medical practitioner.

Medical Arrangements in Egypt.

Dr. Cameron asked the Secretary of State for War whether it was true that in the original medical arrangements for the Egyptian campaign the establishment of a base hospital at Cyprus was proposed by the heads of the Army Medical Department and agreed to by the military authorities; whether the military authorities afterwards decided that Cyprus should not be used for hospital purposes till the month of October; whose duty it was to inform the Director-General of the Army Medical Department or principal medical officer in Egypt of this change in the medical arrangements; if he could state the date at which the alteration was decided on, and the date at which the heads of the Army Medical Department, at home or in Egypt, were informed of it and instructed to make other arrangements for their base hospital.—Sir Arthur Hayter: In reply to the first question, Yes. In the original arrangements of the campaign it was contemplated to establish a base hospital at Cyprus. In reply to the remaining four questions, I think I cannot do better than quote the words of the report of the Committee of Inquiry, which gives a history of the arrangements made at Cyprus. It is in the official report of Lord Morley's Committee which was laid upon the table recently. (The hon. baronet read a long extract from the report in question. It was to the effect that when once the expedition had started, it was for Lord Wolseley, the commander, in consultation with the chief of his staff and his principal medical officer, to make any changes in the hospital or other arrangements which had been originally made according as the varying circumstances of the campaign might render necessary.)—Dr. Cameron said the hon. baronet did not seem to understand the purport of his question. In the report in question Mr. Wilson asked whether Dr. Hanbury was not aware that on the 24th of August Sroidos had been abandoned as a hospital. Dr. Hanbury replied, "On the contrary, I was under the impression that Cyprus was to be my base." He was asked, further, if he did not get information that Cyprus was to be used until the autumn. Dr. Hanbury replied that he never heard of it. He (Dr. Cameron) found, further, that on Dec. 9th seventy-two sick were sent.—The Speaker said the hon. gentleman was not putting a question which arose out of the answer.—Dr. Cameron said he would give notice that he would put the question to-morrow, altering the word Cyprus so as to discriminate between Sroidos and Limasol.—Lord R. Churchill asked if the hon. baronet would state to the House as a positive fact that Dr. Hanbury had been provided with information before the 7th that Cyprus would not be used.—Sir A. Hayter read from the report that the two medical officers at the head of the staff were present on the 4th of August, when they were informed of the change from Mount Olympus to the higher ground of Polymelia, the lower ground of which could not be used.—Lord R. Churchill: What was the date of that?—Sir A. Hayter said that question must be asked when the vote came on for discussion. The Government had laid on the table the full story of this question in the report of Lord Morley's Committee; and when that report was considered on the medical vote of the Army Estimates, an opportunity would be afforded of getting full information.

The Medical Act Amendment Bill.

Lord R. Churchill asked the First Lord of the Treasury whether he could state the intention of the Government

with regard to the Medical Act Amendment Bill; on what day the Government proposed to take the second reading of that measure; or if he could name any day on which he would be able to state positively when the second reading would be taken. Mr. Gladstone replied that he would say nothing about this Bill, which would lead to the supposition that the Government proposed that it should interfere with the progress of the Corrupt Practices Bill or Tenants' Compensation Bill. But the Bill had been the product of very great labour; he believed it had the general, he might almost say the universal, assent of the medical profession, and it embraced provisions of very great utility and importance. Under those circumstances, the Government believed it would have a favourable reception in the House, and they looked forward to its being passed during this session. Without prejudice to other arrangements, he should study to obtain some progress for the remaining stages of the Bill at an early date. Lord R. Churchill pointed out that the uncertainty as to the exact date at which the second reading would be taken was causing great inconvenience to many professional men, who were waiting in town hoping that it would come on. He hoped that the Prime Minister, if he could not now say when it would be taken, would promise that some days' notice should be given. Mr. Gladstone said he would endeavour to do that. The best way would be for some representatives of the Medical Council to communicate with his right hon. friend (Mr. Mundella), who would then endeavour to make a satisfactory arrangement.

Nazareth House.

Sir C. Dilke, replying to Mr. O'Connor Power, said copies of Mr. Spear's report on the sanitary condition of this establishment would be distributed in a day or two. The report described the management in sanitary affairs as excellent.

Medical News.

UNIVERSITY OF CAMBRIDGE. — At a congregation held on May 31st the degree of M.B. was conferred on

Adolphus J. Richardson, of King's.

The following gentlemen have been appointed electors to the Professorship of Surgery:—Mr. William Bowman, LL.D., Mr. William Cadge, F.R.C.S., Mr. Timothy Holmes, late of Pembroke College, Sir James Paget, LL.D., Dr. Michael Foster, Mr. Joseph Lister, Professor Paget, and Dr. Ferrers.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on May 31st:—

Bentlif, Philip Barnett, Winchester-street, Salisbury.
Brenton, William Hore, John-street, Plymouth.
Morgan, George, Salop-street, Market Drayton.
Ogle, Arthur Wesley, Sevenoaks.
Sumner, Wm. John, Holme Lane, Hillsbro', Sheffield.
Wise, Walter, Duke-street, Manchester-square.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Frank Septimus Barnett, St. Bartholomew's Hospital; Wm. Murray M'Queen Clapp and James Wm. Draper, University College; John Wilford Cooper, Charing-cross Hospital; William George Hall and Edward Richards, London Hospital; Wm. Edw. Gillson Jackson, Westminster Hospital.

ROYAL COLLEGE OF SURGEONS.—On Wednesday next Professor Hutchinson will commence his course of six lectures on "Certain Diseased Conditions of the Tongue."

ROYAL INSTITUTION OF GREAT BRITAIN.—James Dewar, M.A., F.R.S., has been reappointed Fullerian Professor of Chemistry.

THE new buildings of the Chelmsford and West Essex Dispensary and Infirmary are expected to be completed and ready to receive patients by October next.

A PATIENT of the Bradford workhouse was poisoned last week by having administered to him a dose of carbolic acid in mistake for "house mixture."

THE forty-first annual meeting of the Royal Medical Benevolent Fund Society of Ireland was held on the 4th inst., presided over by the President of the Royal College of Surgeons.

CORK MATERNITY. — At the recent examinations at the close of the past session the following gentlemen obtained prizes, &c:—Mr. W. J. Macquillan (1st), prize; Mr. W. E. D. Prendergast (2nd), prize; Mr. R. Kelly (3rd), certificate.

AN accident ambulance has been placed at the central police-station, Bridewell-street, Bristol, to be horsed and worked by the fire brigade. The ambulance is to be put into communication with the telephone system of the city.

THE VICTORIA HOSPITAL FOR CHILDREN.—At the annual meeting last week the governors decided that the present condition of the funds of the hospital does not warrant them in proceeding with the building of the new wing for out-patients, plans for which have already been prepared. The sum of £2500 is required to carry out the desired extension.

PAYMENT FOR POOR-LAW MEDICAL SERVICES.—At the South Midland Poor-law Conference held at Hitchin on the 21st ult., a paper was read by Dr. Prior, medical officer of health for Bedford, in which he advocated the payment by salary, rather than by case, of Poor-law surgeons. A resolution in accord with the views propounded by Dr. Prior was carried by sixteen votes against two.

SANITARY ASSURANCE ASSOCIATION. — Captain Douglas Galton delivered the third of a series of Wednesday evening lectures on the 6th inst. at 9 Conduit-street, W., on the subject of Co-operation in Sanitary Matters. Captain Galton instanced the advantages which had resulted from co-operation in connexion with life and fire insurance, and argued in favour of the same principles being applied for the preservation of life from preventable diseases.

THE inquest at St. George's Hospital on Mr. W. G. Sutcliffe, M.R.C.S., of Hatfield, who was found dead in a train on its arrival at Victoria Station on the 1st instant, was concluded on Tuesday. Dr. Lomas, who had made a careful examination of the body, gave it as his opinion that death had resulted from syncope, arising from disease of the heart and liver. A verdict of "Death from natural causes" was returned.

UNIVERSITY OF EDINBURGH.—The second examination for the Charles Murchison Scholarship in Clinical Medicine was held in Edinburgh on April 17th and 18th, the first examination having been held in London last year. Twelve candidates entered their names for the competition, and the examination was conducted by Dr. George Balfour, President of the Royal College of Physicians of Edinburgh, and Professors Maclagan and Greenfield. The Scholarship was gained by George Cecil Dickson, M.B., C.M. Edin. The next in order of merit was John Bland Sutton, M.R.C.S. and L.R.C.P. Lond., and several of the candidates displayed much merit.

BELFAST ROYAL HOSPITAL.—The usual quarterly meeting of the General Committee of this hospital was held on the 28th ult., when a very encouraging report on the working of the new department for diseases of women was presented by Dr. Byers, the physician in charge of the department. During the past three months the dietary of the hospital and convalescent home has been carefully revised by the board of management in co-operation with the medical staff, and is now in regular operation in both places. It was suggested that a portion of the convalescent home should be reserved for the reception of pay patients, but no arrangements were made.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST.—The anniversary festival of this hospital was held at Willis's Rooms on the 1st inst. The Prince of Wales presided, and in proposing the toast of the evening traced the rise and progress of the hospital, and alluded to the deep interest always felt in its prosperity by members of the Royal Family. It was stated that in 1872 the patients registered were 4806, and last year they were 7017. The annual subscriptions received eleven years ago were £9047, and last year they amounted to £16,039. Subscriptions amounting to £4355, including £50 from the Queen and 100 guineas from the Prince of Wales, were announced during the evening.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANDERTON, JAMES, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Hayfield District and Workhouse of the Hayfield Union.

BARNES, J. J. FREDERIC, M.R.C.P., F.R.C.S.Ed., has been appointed Assistant Medical Officer to the Fisherton House Asylum, Salisbury.

BATTERBURY, R. L., M.D.Lond., has been appointed Honorary Surgeon to the West Herts Infirmary, vice W. H. Hobson, M.R.C.S., resigned.

CHAPMAN, JAMES MILNE, M.B., M.R.C.P.Ed., M.R.C.S., has been appointed Assistant Gynecologist to the Edinburgh Provident Dispensary.

DAY, ALBERT BRYAN, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Schools at Isleworth, Brentford Union.

GRAHAM, JAMES, M.B., C.M., has been appointed Medical Officer for the First District of St. Cuthbert's Parish, Edinburgh.

HIND, ALFRED E., M.R.C.S., L.R.C.P.Lond., has been appointed Assistant-Surgeon to the Tewkesbury Hospital.

LLOYD, MORGAN, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Llanwinio District of the Carmarthen Union.

MCPHEE, DUGALD, M.B., C.M.Glas., has been appointed Medical Officer for the Parishes of Strachur, Strathlachan, and District.

REECE, RICHARD, M.R.C.S. & L.A.C., has been appointed Medical Officer for the Walton District of the Chertsey Union.

ROBERTSON, DAVID, M.D., M.Ch. Q.U.I., has been appointed Medical Officer for the Kirkheaton District of the Huddersfield Union.

SMITH, GEORGE WILLIAM, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Kegworth District of the Shardlow Union.

STONHAM, CHARLES, M.R.C.S., has been appointed Surgeon to the North-West London Hospital.

Births, Marriages, and Deaths.

BIRTHS.

ADAM.—On the 1st inst., at Fernhead-road, St. Peter's-park, W., the wife of Caleb Donovan Adam, L.R.C.P.Lond., of a son.

DON.—On the 29th ult., at Sevenoaks, the wife of Arthur G. Don, M.R.C.S., L.R.C.P., of a son.

DOUGHTY.—On the 1st inst., at Friern Lodge, Lordship-lane, Dulwich, the wife of W. Doughty, M.R.C.S., of a son.

DOWDING.—On the 4th inst., at Barking-road, E., the wife of A. W. Woodman Dowding, M.D., of a son.

JONES.—On the 31st ult., at Ore, Hastings, the wife of W. Grant Jones, L.R.C.P.Ed., of a daughter.

OWEN.—On the 29th ult., at The Hollies, Shore-road, Hackney, the wife of William Owen, M.R.C.S., of a son.

RATTON.—On the 7th ult., at Chittoor, Madras Presidency, the wife of Surgeon-Major Jas. J. L. Ratton, M.D., of a son.

SHAW.—On the 17th ult., at Brentwood House, Burley, Leeds, the wife of Robert F. Shaw, L.R.C.P.Ed., L.R.C.S.Ed., of a son.

MARRIAGES.

GASTEEN—DYAS.—On the 24th ult., at Christ Church, Leeson-park, Dublin, William Charles Gasteen, M.B.T.C.D., Surgeon-Major, Army Medical Department, to Margaret Adelaide, eldest daughter of Henry Dyas, Esq., of Castlepole, Kells, Meath.

GEOGHEGAN—EVENS.—On the 26th March, at Holy Trinity Church, Mackay, Queensland, Francis Meagher Geoghegan, M.D.Q.U.I., son of the late Thomas Geoghegan, A.M., Solicitor, of Dublin, to Rose Bawden, eldest daughter of the late William Hole Evens, jun., of Plymouth, Devon.

ROSS—LOCKWOOD.—On the 2nd inst., at St. Peter's Church, Brighton, John Harris Ross, M.D., of St. George's-place, Brighton, to Susie, daughter of Philip Causton Lockwood, C.E., of Brighton.

STEIL—CHAPMAN.—On the 31st ult., at Trinity Church, Marylebone, George R. Steil, L.R.C.P., M.R.C.S., youngest son of James Steil, R.N., to Minnie, youngest daughter of the Rev. Charles Chapman, M.A.

DEATHS.

BOASE.—On the 4th ult., at Seafield House, Magdalen-place, Dundee, Henry S. Boase, M.D., F.R.S., F.G.S., &c., aged 83.

BRINE.—On the 4th inst., at Rowlands, Wimborne, Dorset, John Edmund Brine, M.R.C.S., L.S.A.Lond., formerly of Shaftesbury, aged 61.

CLERIHEW.—On the 30th ult., at Addison-gardens, Kensington, George Clerihew, M.D., Inspector-General of Hospitals.

JONES.—On the 29th ult., at Cambridge-road, Hastings, Robert Edwards Jones, M.R.C.S., late of Long Melford, aged 57.

MCINTYRE.—On the 25th April, at Avoca House, Natal, South Africa, of acute inflammation of both lungs, John, infant and only son of Dr. McIntyre.

PAIN.—On the 3rd inst., at Liverpool-street, Dover, Surgeon-General George Pain, late 11th Hussars.

TAYLOR.—On the 30th ult., at Long-street, Middleton, Frederick Handel Taylor, Surgeon, son of the late Edmund Taylor, M.D., of Middleton, in his 53rd year.

WEST.—On the 24th ult., at Edgbaston, James F. West, F.R.C.S.Eng., aged 50.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, June 7th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 1	30·07	S.E.	60	53	107	72	49	..	Hazy
,, 2	30·10	W.	64	59	106	74	51	..	Hazy
,, 3	30·22	S.E.	61	57	111	75	51	..	Fine
,, 4	30·01	E.	58	54	117	77	49	..	Overcast
,, 5	29·88	N.E.	62	56	115	75	50	..	Cloudy
,, 6	29·86	E.	56	51	117	71	46	..	Cloudy
,, 7	29·79	E.	52	50	..	55	50	..	Overcast

Medical Diary for the ensuing Week.

Monday, June 11

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. Frederic Samuel Eve, "On Cysts and Cystic Tumours in General."

Tuesday, June 12

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Garson, "On the Respiratory System of Mammalia."

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. Edward B. Tylor, "On Old Scandinavian Civilisation among the Modern Esquimaux."—Mr. A. W. Howitt, "On some Australian Beliefs."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8 P.M. Ballot.—8.30 P.M. Dr. G. Thin, "On the Bacillus of Leprosy."—Dr. T. Colcott Fox, "On Urticaria Pigmentosa."—Sir Henry Thompson, "On Twelve Cases of Tumour of the Bladder, and the Operation for the Removal of the Growth."—Dr. F. Warner will give a Demonstration of a Method of Obtaining Graphic Records of the Movements of the Fingers, &c., and for Enumerating such Movements.—Dr. Barlow will show a Case of "Osteitis Deformans."

Wednesday, June 13

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Jonathan Hutchinson, "On Certain Diseased Conditions of the Tongue, with Special Reference to their Meaning as Symptoms."

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Professor F. Jeffrey Bell, "Note on the Spicules of Cucumaria Calcigera, C. hyndmanni, and of Two Allied Forms."—Mr. Conrad Beck, "On some New Cladoceræ of the English Lakes."—Herr J. Flagel, "On Cutting Sections of Diatoms."

THE PARKES MUSEUM OF HYGIENE.—5 P.M. Professor T. Hayter Lewis, "On the Employment of Artistic Materials in the Architecture of Houses and Hospitals." The lecture will be illustrated by objects in the museum.

Thursday, June 14

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

THE PARKES MUSEUM OF HYGIENE.—8 P.M. Professor W. H. Corfield, "On Common Defects in the Sanitary Arrangements of Houses and their Remedies."

Friday, June 15

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Jonathan Hutchinson, "On Certain Diseased Conditions of the Tongue, with Special Reference to their Meaning as Symptoms."

Saturday, June 16

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

POISONOUS EFFECTS OF PETROLEUM SMOKE.

A CURIOUS instance of poisoning from the smoke of petroleum is reported in the *Neue Freie Presse* of Vienna. A working man's wife brought to a local hospital a child eighteen months old who had been seized early in the morning with violent convulsions, and had subsequently become unconscious. She also stated that her husband, on awaking, had been taken with cramps, and had an uneasy sensation in his upper and lower extremities, accompanied by headache, from which she was also suffering. The singular colour of the child and the results of careful examination led to the conclusion that there had been acute poisoning from smoke-gases. It was then discovered that in the small and ill-ventilated bedroom occupied by the parties in question a petroleum lamp was used as a night-light, the flame being reduced as much as possible. The wick had, however, been left projecting without the protection of a glass cylinder. In this way the flame of course emitted smoke. The father (himself a delicate man) was also found to exhibit symptoms of poisoning. By the exertions of the medical men in charge of the cases, both the father and the child have progressed so far towards recovery that their restoration to health is confidently expected.

Mr. J. Reynolds.—Dr. Weir Mitchell's book on "Fat and Blood, and How to Use Them," to be obtained of any publisher.

"CIGARETTE SMOKING."

To the Editor of THE LANCET.

SIR,—As I have given some little attention to cigarette smoking, or, to be more particular, the inhalation of the smoke, I should like to know if my observations correspond with those of any of your readers?

This mode of smoking does not seem to excite the action of the salivary glands to the extent of either the cigar or pipe, but as carbonaceous particles are deposited on the upper part of the larynx and pharynx, the glands in this region are kept in a chronic state of congestion by the irritation. I have known some cigarette smokers to suffer from continual "hawking," the phlegm being very nearly black. The smoke, if I judge correctly, rarely passes beyond the bronchi, as the result of which slight attacks of asthma occur. If any enter the air vesicles, as generally supposed, it must be a very small quantity, for, as a rule, it is nearly immediately expelled, and there can be little time for diffusion. In many persons the action of the heart is inhibited, the beats being less frequent, and a marked alteration in the radial pulse is evident. A sense of uneasiness and light headedness is also present. These last phenomena are most marked on the first morning smoke.

I am, Sir, yours truly,

Littleport, June 3rd, 1883. MEYER DUTCH, L.R.C.S.I.

RESIDENT SURGEONS AND MATRONS OF HOSPITALS.

To the Editor of THE LANCET.

SIR,—I have been informed that it is the usual custom in England for resident surgeons to hospitals to take their meals at the same table as the matron. I would like to know if such is really the case, as there certainly appears to me to be an enormous social disparity between them, and, in addition, it looks like a breach of discipline, as the resident surgeon is usually empowered to supervise the matron. Some would answer me by stating that matrons of hospitals are often ladies by birth, and sometimes even the widows of medical men; but I consider that is nothing to the point, as we go by present position, and not past. In your last number there is an extraordinary case in which the matron would appear to be above the resident surgeon. You remark that her powers ought to be curtailed, with which, I think, everyone will agree.

I am, Sir, yours, &c.,

June 4th, 1883. INQUIRER.

"MURUNGAI OR MURUNGAH."

IN reference to the article on this subject by Mr. Holmes, published in our columns last week, *Mr. Brito* writes:—"From Mr. Holmes's criticism it would be legitimate to infer that I had stated or implied that the leaves were employed in Ceylon for the treatment of hydrophobia,—by which I understand a morbidly exalted condition of the nerve-centres, a tendency to convulsions, inability and dread of swallowing water, &c. Any sensible person reading my article cannot attribute such a statement to me, nor legitimately draw such an inference. What I did say, and still maintain, is that I have seen a dozen times the leaves formed into a paste with caustic lime and applied to a recent dog-bite. It does not, I think, require much discrimination to be able to draw the distinction between means employed for the prevention and those for the cure when a disease has once manifested itself. . . . . Against Mr. Ondaatje's remark that the plant is not known by its Malayan name, I have nought to say, for I did not maintain the contrary. . . . . I am a native of Ceylon, by birth a Tamil; and I can honestly say that I never heard the tree in ordinary everyday usage called 'Sohunjana.' . . . . That the method of treating dog-bites used by the natives may on trial prove inefficacious, I am quite prepared to admit; the whole scope of my contribution being, as it must be evident, to draw professional attention to a fact repeatedly witnessed, and to invite the crucial test of experimentation in order to ascertain its efficacy or uselessness."

Bacillus.—The Education Department has decided that whenever a medical certificate is required by a School Board in explanation of the absence of a child from school, the cost of the certificate is to be defrayed by the Board (see THE LANCET, Feb. 25th, 1882).

SALICYLATE OF SODA.

To the Editor of THE LANCET.

SIR,—During the last few years much has been written on the physiological actions and therapeutical applications of the salicylate of soda, and as I have enjoyed ample opportunities of observing the effects of this drug at the bedside, it may be interesting to your readers if I record the results of my observations, more especially as they differ very materially from the views that are generally accepted on this subject.

We are told by many authorities that salicylate of soda is a cardiac depressant, and that great caution must be exercised in administering it. Now, my experience does not accord with such testimony. To one man I ordered twenty grains to be given every three hours for six weeks. It was administered with great regularity. Pulse tracings were taken every second or third day; the state of the heart was carefully watched daily, and at no time during its long administration was the slightest depression produced in the circulation. In another case I actually gave forty grains three times in the course of one day with the same negative results, and in many other instances I have given twenty grains every three hours for periods varying from a fortnight to a month, and although the state of the circulation was frequently examined in each of these cases, no cardiac depression was detected. The full physiological effects, which are analogous to chinchonism, were produced in all these cases. They consisted of deafness, tinnitus, vertigo, and headache; and of these the most constant and most marked symptom was deafness. None of my patients suffered from gastric or intestinal irritation, or any other symptom which interfered with its continuous administration. If cardiac depression was one of the physiological effects of salicylate of soda it ought to have been produced in at least some of my cases.

Every practitioner of medicine knows that depression of the circulation, sometimes amounting to syncope, occurs in acute rheumatism, and that quite independently of the administration of any drug. I fear that salicylate of soda has frequently been credited with such effects when they have arisen from totally different causes. I think that it is right the profession should know that false alarm is deterring them from using in sufficient quantity one of the most valuable therapeutical agents which we possess. In acute rheumatism it ought to be administered in twenty grain doses every three or four hours until the acute symptoms have subsided, when the quantity should be reduced to twenty grains three times a day, and continued to be given in that quantity for ten days thereafter.

I am, Sir, yours faithfully,

Old-square, Birmingham, May 21st, 1883. JNO. HOSACK FRASER.

Annie had better apply to the secretary of the school, 30, Henrietta-street, Cavendish-square, W.

"DECLARING ON."

To the Editor of THE LANCET.

SIR,—It is very common for members of sick clubs whilst at work to get rheumatic pains, declare on the funds, and in a few days declare off and return to their work, whilst others will remain away a long time, saying that they cannot work in consequence of some pain or the other (simulating muscular rheumatism) becoming a fixture, which neither gets better nor worse. Sometimes the pain complained of is the result of a sprain or sudden twist of the body. Now, as these men are often suspected of laziness, I am most anxious to know whether there is any way of determining true from fictitious pains.

I am, Sir, your obedient servant,

May 0th, 1883. A COUNTRY DOCTOR

SIR HENRY THOMPSON AND CIGARETTE SMOKING.

Inquirer and others.—The cotton-wool tubes referred to by Sir Henry Thompson are made by Mr. Beckenham, 415, Strand.

Mr. Alexander Duncan will readily understand that the publication of names in connexion with this matter is out of the question. He will also perceive that the statements made by THE LANCET and by other authorities are in entire accordance with the bye-laws of the Faculty, which permit the Faculty to grant the Fellowship for a money consideration to any person already possessing a qualification in surgery.

"HYDROPHOBIA."

To the Editor of THE LANCET.

SIR,—In No. 2909 of THE LANCET, 1880, I gave an account of the health of a dog whose bite had caused a death from hydrophobia, fully reported in this journal in May, 1854. This dog was to all appearance in good health. I kept him tied to the table in my rooms for two or three days; he drank water from the first. The mother corroborated the statement of the patient, that it was the same dog. She brought the owner, who lived in the same road, for he objected to have it killed, as he stated he believed the dog was quite healthy, and to settle the dispute I asked for him to be left with me. I had kept several valuable breeds, and was quite up in the treatment of them. I still carry the scars in my hand from the bite of one of a litter of Sir Courtney Honeywood's crossed with Lord Londesborough's breed of retrievers, which was suffering from salivation, snapping of the teeth, dull blear eye, dull, dusty, hot coat, and staggering walk, with fits. The preliminary particulars not before published are that a young governess turned her dog (a bitch) into the road for a morning run; when she let it in again it was followed by a large black half-bred fox terrier with a white patch on his chest. Upon her shaking her dress at him to drive him out, he sprang up and bit her inside the upper lip and on the nostril. The girl's action does not seem sufficient to have been enough to rouse him to attack her, but the bitch was menstruating, and the excitement in the other no doubt made the saliva in a more heated unhealthy state, and his aggressive instinct dominant. There was about the same time a case in King's College Hospital, and both cases were seen by the medical staff of the other hospital, and a different treatment was carried out in each case upon an arranged plan to prevent repetition. It created much interest in the profession, and I had a large general correspondence upon the case and subject. "D. J. M.'s" case seems to be so parallel that I have taken the liberty to enter more fully into the preliminaries of this occurrence.

I am, Sir, yours faithfully,
Brixton, June 2nd, 1883. WARREN H. DIAMOND.

A Student.—One of the best books is Grantham's on Public Slaughter-houses, published by Messrs. Weall, in 1848, and there have been many reports on the subject. Mr. H. F. Lister, of 3, Elm-court, Temple, the hon. sec. of the London Model Abattoir Society, would probably supply our correspondent with references to some of the most useful and practical modern reports.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—Would you kindly inform me what is considered medical etiquette in the following case?

Dr. F. is the family attendant. The wife is brought in suffering from threatened miscarriage, for which Dr. F. attends her for a week, as he has solely done the family for nine years previously. He is suddenly called to the country, and instructs the husband to call in Dr. J. if necessary. The patient finds Dr. J. from home, and calls in Dr. L., explaining to him that he is only called in on account of Dr. F.'s absence. The miscarriage takes place in Dr. L.'s hands. Dr. F. returns some hours afterwards. Does Dr. F. return to his case, or does Dr. L. continue? The patient does not understand such medical etiquette in this case, and asks Dr. L. who will go on attending, and he informs her that he (Dr. L.) will. I am, Sir, yours truly,
S. Africa, May 9th, 1883. MEDICUS.

*** Supposing Dr. L. and Dr. F. to be neighbours and on ordinarily good professional terms, Dr. L. should regard himself as acting for Dr. F., and hand the case over to him.—ED. L.

Mr. George A. Young.—Three qualifications taken now or one entitles a man to registration. Once registered, he will be able, as the Bill stands, to register any further titles on payment of probably a small fee as at present.

SUBCUTANEOUS INJECTION OF MORPHIA.

To the Editor of THE LANCET.

SIR,—About six months since, in consequence of suffering uninterrupted pain, I was obliged to resort to the subcutaneous injection of morphia, and unfortunately, although now well, the habit has grown upon me. At the present time I am injecting from eight to ten grains daily. I should be most thankful to any of your readers who would advise me what course to pursue in order to give up this distressing habit. I have attempted to reduce the quantity, but being obliged to continue my duties, I find it most difficult to resist what is to me a powerful stimulant. Any advice would be most gladly received and adopted. Trusting to your kindness to insert this letter in your most valuable journal, I am, Sir, yours obediently,
June 4th, 1883. A MEDICAL STUDENT AND ASSISTANT.

TRAINED NURSES.

Medicus desires information as to any country hospital that receives and trains ladies as nurses.

M.D. (Brux.).—A good "medical biography" is still a derideratum. The names, dates, and chief events of most of the more eminent physicians and surgeons of past times will be found in any good general dictionary of biography. The following may be recommended among special works:—1. Bayle et Thillaye, Biographie médicale par ordre chronologique, d'après Daniel Leclerc Eloy. 8vo. Paris, 1855.—2. Hutchinson's Biographia Medica. 2 vols., 8vo. 1779. "Amusing but deficient in literary information" (Young).—3. Jourdan, Biographie médicale. 7 vols., 8vo. Paris, 1820-25.—4. Pettigrew's Medical Portrait Gallery. 4 vols., 4to. London, 1840.

MEDICAL TITLES.

To the Editor of THE LANCET.

SIR,—Hoping that the Medical Act Amendment Bill will be passed this session, and the question of titles compulsorily settled by the House of Commons, either according to the students' wish as licentiates of the Medical Council in medicine, surgery, and midwifery, or, according to my idea of plain common sense, I would suggest that as all who pass the new Examining Boards will be qualified in medicine, surgery, and midwifery, they be called general practitioners of medicine, surgery, and midwifery. Also that there should be a clause to allow all those previously qualified and registered in medicine, surgery, and midwifery to be allowed to assume the title of a general practitioner of medicine, surgery, and midwifery on the payment of a small fee, say 2s. 6d. to 5s., to cover the expense of registration and correspondence. This would do away with many heart-burnings and ill-feelings now existing in the profession.

I know of many licentiates of Colleges of Physicians and Surgeons of England, Ireland, and Scotland calling themselves physicians and surgeons, assuming to possess superior knowledge and ability over and above the English M.R.C.S. and L.S.A., which they certainly do not possess, all legally practising on the same footing—i.e., visiting and dispensing medicines for their own patients in private, club, and union cases. I happen to have passed a year before the Medical Act of 1858 existed, and was compelled, *nolens volens*, to obtain the L.S.A. to enable me to conduct a general practice legally.

I am, Sir, obediently yours,
May 29th, 1883. M.R.C.S., L.M., L.S.A.

Enquirens.—1. Our correspondent will find most of the information he desires in the "Colonial Office List," under the head of the different colonies, and of the rules and regulations for the colonial service. Harrison, 59, Pall-mall, is the publisher.—2. We are not aware of any such appointments as he refers to in India.

Mr. Cragg.—The observation is not new, and has unfortunately a basis of truth.

Mr. Greenway.—The proposition seems to us impracticable.

MOUNTING URINARY DEPOSITS.

To the Editor of THE LANCET.

SIR,—Will some of your microscopical correspondents tell me the best way to mount urinary deposits so that they will keep? Wishing lately to preserve some fine specimens of stellar phosphate of lime, I proceeded as follows:—Having left the urine to stand sufficiently long in a conical glass for ordinary microscopical examination, I drew off the upper portion with a syphon, and having filtered the remainder, I washed the filter paper into a conical glass with distilled water, and having left it for some hours to deposit, drew off the upper portion, placed a drop of the deposit on a cover glass, and evaporated the water over a spirit lamp, leaving the crystals attached to the glass. I then placed a drop of Canada balsam on a cover glass, and pressed it down on a glass slide, but on placing it under a microscope I found the crystals had vanished. I repeated the experiment with the same result. I wish to know wherein was the failure. I am, Sir, yours truly,
Mallow, Co. Cork, June 2nd, 1883. F. W. GREENE, M.B.

Hibernian can be registered now, and should at once register. He should also as soon as possible take a medical qualification.

Dr. Hayward will see an article on the subject in our present number.

UNFAIR COMPETITION IN MEDICINE.

To the Editor of THE LANCET.

SIR,—I live—or rather endeavour to do so—in a cathedral city where several large foundries give constant employment to a number of well-paid artisans. Like some of your correspondents, we are heavily handicapped in the struggle for life by the existence of club dispensaries, which take in their embrace almost all classes, from a day labourer to a town councillor; but the worst feature of these institutions we have to contend with is the fact that their medical officers unblushingly engage in practice on their own account, though they have signed the usual bond not to do so. Can any of your readers suggest a remedy for this evil? We have a large well-appointed hospital, a free public dispensary, two private dispensaries where medicine and advice may be obtained for the low sum of 6d., and if we add to these prescribing chemists, midwives, and quack doctors, what is left for the legitimate practitioner is not difficult to imagine.—I am, Sir, yours obediently,
May 22nd, 1883. TRUTH.

THE INFLUENCE OF THE LYMPHATIC GLAND IN THE CRURAL CANAL ON PHLEGMASIA ALBA DOLENS.

To the Editor of THE LANCET.

SIR,—The above-named gland, forming on either side a most important link between the lymphatics of the trunk and lower extremity, is the most dependent part or base of the former, as it is the summit of the latter. It is admitted that phlegmasia alba dolens is caused by the absorption of septic matter from the system by the lymphatics of the pelvis. The germs thus absorbed set up inflammation. Inflammation produces local hypertrophy. To the anatomist it is evident that the lymphatic gland, occupying the innermost compartment of the sheath of the femoral vessels, is incapable of expansion, so completely is it bound down and limited by the various structures in its immediate neighbourhood in any direction save outwards. Externally it is almost in actual contact with the femoral vein, being separated merely by the septum—a film of the transversalis fascia—which practically offers no resistance. Inflammation having set in, the enlarging gland presses upon the vein, bulging in its walls. A projection being thus formed into the cavity of the vessel, an eddy or backwash in the current of blood is produced, and, consequent thereon, disintegration of the white corpuscles occurs, and phlebitis is set up. The limb now, owing to venous obstruction, becomes œdematous, having the bluish colour and pitting on pressure, the first familiar characteristics of phlegmasia. Inflammation continuing, the stroma of the gland increases in density and chokes up its afferent lymphatics. Stasis of lymph occurs. The œdema loses its merely venous character, the limb becomes tense and hard, and will not pit on pressure—second familiar characteristic. Pain is a marked feature in the initial stage of this disease. In several cases under my observation, and in the communicated experience of many practitioners consulted by me on the subject, pain, deeply seated in the groin, has been the first symptom complained of. This fact is to a certain degree in favour of the theory of the pathology of phlegmasia now proposed. In the whole system there is no other gland so situated that its enlargement could produce a train of events similar to what I have described. If any gentleman who has the opportunity of making a post-mortem examination of the body of a patient who suffered from phlegmasia would direct his attention to an examination of this gland, the result might confirm what at present is but a probability. The idea may be of practical value in this way that, if the disease, as it manifests itself, be due to the tension of the fasciæ surrounding the gland, a subcutaneous division of its anterior investments would give it room to expand otherwise than directly into the femoral vein. Thus the phlebitis, with its certain inconvenience and possible danger to life, would be avoided.

I am, Sir, yours, &c.,

JAMES T. LAFFAN, L.R.C.S.I., &c.

Bishopsgate-street Without, May 8th, 1883.

PERSPIRATION IN THE AXILLÆ.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers may be able to give me information as to the best method of checking the secretion of perspiration under the arms. I have found in some cases the secretion so profuse as to quite spoil the clothes. I am, Sir, yours, &c.,

May 6th, 1883. THROMBOSIS.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor De Chaumont, Southampton; Rev. G. White, Ashburton; Dr. Goyder; Mr. Barnardo, London; Mr. K. Millican, Kineton; Mr. Chaumont; Mr. Hetherington, Ipswich; Dr. Hayward, Liverpool; Mr. Makuna, London; Dr. F. W. Barry, London; Mr. W. H. Borham, London; Mr. Whitefoord, London; Mr. Turton, Heckmondwike; Mr. Diamond, Brixton; Mr. Brito; Mr. G. H. Davies, London; Dr. S. T. Smyth; Mr. G. E. Young, Antrimville; Mr. Greene, Mallow; Mr. Greenway, Plymouth; Dr. M'Intyre, Natal; Mr. Dutch, Littleport; Mr. Karop, London; Mr. D. A. King, London; Mr. Armstrong, Newcastle-on-Tyne; Messrs. Young and Postans, London; Dr. Sandford, Hereford; Dr. Reynolds, London; Mr. C. E. Harrison, London; Mr. Voisey, Manchester; Mr. Addenbrooke, Kidderminster; Messrs. Robinson and Barnsdale, Nottingham; Mr. Clay, Birmingham; Mr. Saunders, London; Mr. Clark, Stoke Newington; Mr. Saunder, Manchester; Mr. Price, Wolverhampton; Mr. Griffiths, Bristol; Mr. Oliver, Stockton-on-Tees; Miss Gardiner, Brighton; Messrs. Peebles and Son, London; Mrs. Funnelle, London; Dr. Deane, London; Mr. Ostell, Carlisle; Dr. Bramwell, Edinburgh; Mr. Russell, London; Mr. Capell, London; Dr. Stewart, Ballymead; Mr. Cornish, Manchester; Dr. Kerr, Crawshawbooth; Mr. Llanwarne, Hereford; Messrs. Kegan Paul and Co., London; Mr. Turton, Bury; Messrs. Debenham and Tewson, London; Mr. Barff, London; Mr. Baker, York; Dr. R. Carter, Bath; Mr. Gurner; Dr. Corbett, Lucknow; Mr. Young, Chilton Polden; Dr. W. Carter, Liverpool; Mr. Jesse, Henbury; Dr. Norman Kerr, London; Mr. Cragg, London; Mr. Griffiths, Cardiff; Dr. Mackenzie, Burnley; Mr. Savory, London; Dr. Park, Glasgow; Mr. Clement Lucas, London; Dr. Buzzard, London; Mr. H. E. Clark, Glasgow; Mr. Harvey, Bournemouth; Dr. Johnson, Liverpool; Messrs. Ledger, Smith, and Co., London; Dr. Smith, Holloway; Messrs. Mossop; Mr. Sharp, Walsall; Dr. Broderick, Tavistock; Messrs. Jolly and Son, Norwich; Mr. Pardon, Corne Abbas; Mr. Willey, Birmingham; Mr. Pain, Hastings; Dr. Martin, Market-hill; Mrs. Gee, Southsea; Mr. Dowding, Canning-town; Mr. Tuke, Stratton; Messrs. Keith and Co., Edinburgh; Mr. Cornish, Manchester; Dr. C. Cobbold, London; Mr. Shirtliff, Kingston; Mr. Sinclair White, Sheffield; Dr. Atkins, Cork; Mr. Hembrough, Waltham; Mr. Soper, London; Disgusted; A.; W. G., Manchester; M.D.; D. M., Tottenham; M.D., Liverpool; Amicus; J. Manchester; M., Wood-green; H. M. F., Clapton; M.D., Sydney; M.D., Brux.; Inquirer; M.R.C.S.; A Medical Student and Assistant; Enquirens; Medicus; Student; J. W.; Bacillus; Cairo; A. B.; Consulting Dentist; Lex; Investigator; J. B.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Strutt, Brixton; Mr. Ward, Hull; Mr. Thompson, Liverpool; Mr. Bennett, London; Dr. Collier, Hounslow; Dr. March, Rochdale; Mr. Male, Stone; Miss Holme, Bath; Rev. F. Hewett, Over Darwin; Mr. Scott, Sheffield; Mr. Burcombe, Lincoln; Messrs. Austin and Son, Clifton; Mr. Westwood, Birmingham; Mr. Elliott, Padstone; Mr. Marshall, Stoke Newington; Mr. Jones, Hastings; Mr. Pace, Newcastle-on-Tyne; Mr. Hudson, London; Dr. Baker, York; Mr. Hogg, London; Mr. Adams, London; Mr. Menzies, Glasgow; Mr. Lucas, Cambridge; Mr. Godfrey, Northampton; Mr. M'William, Yoxall; Mr. Silverlock, London; Dr. Shaw, Beverley; Dr. Wood, Burton-on-Trent; Dr. Stuart, Ballymena; Mr. Bryan, London; Mr. Walter, Edgbaston; Mr. O'Niel, Haverstock-hill; Dr. Manley, Fareham; Mr. Scattergood, Leeds; Mrs. Prosser, Bromley; Miss Woodburn, Hunsworth; Mr. Turton, Bury; M., Coombe-hill; Vendor, Pimlico; Exemplar; Pericles; Branch; Sister D.; J. T., Middlesbro'; G. P.; J. W. F., Mile-end; B. D. F.; H. J. F., Dublin; P. D. S.; C. H. C. L.; J. P., East Ham; B. C. D., Southampton; Venue; R. B. S.; A. L.; Somerset; Dispensary; S. M. R, Croydon; F. M., Blackfriars; M.B., Finsbury-park; Medicus, Leicester; Medicus, Bradford; H. S. B., Enfield; H. J. S., Shadwell; Medicus, Fulham; &c., &c.

Toronto Globe, Toronto Daily Mail, Alloa Advertiser, Bendigo Evening News, Bath Evening Chronicle, Eastern Argus, Evesham Journal, Liverpool Courier, Liverpool Evening Express, Sunderland Daily Echo, Mid-Surrey Gazette, &c., have been received.

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